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# The Journal

of the

# Maine Medical Association



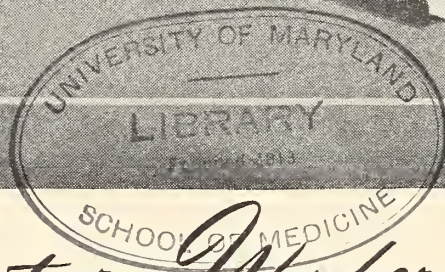
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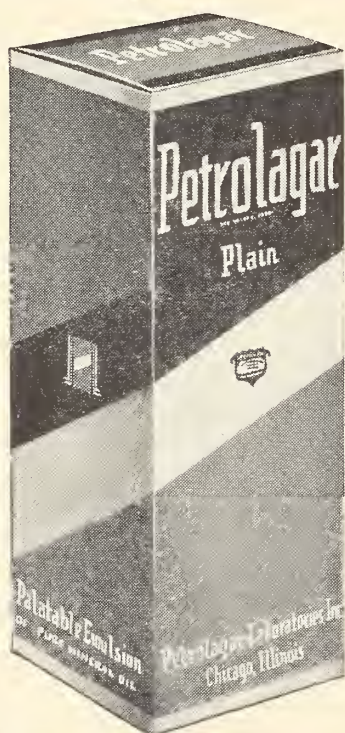
Number One







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# The Journal of the Maine Medical Association

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Volume Thirty-one

Portland, Maine, January, 1940

No. 1

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## *Treatment of Asphyxia Neonatorum*

*A Clinical Study Based Upon an Expression of Opinion Received from the  
Professor of Obstetrics of Sixty-three American  
and Canadian Medical Schools*

The matter which follows is noted from personal communications received from the following universities and medical schools:

Albany Medical College  
University of Alberta Faculty of Medicine  
Baylor University College of Medicine,  
Texas  
Boston Lying-In Hospital  
Boston University  
University of Buffalo School of Medicine  
University of Cincinnati College of Medicine  
University of Colorado School of Medicine  
Dalhousie University Faculty of Medicine,  
Halifax, N. S.  
Duke University School of Medicine  
Emory University School of Medicine  
College of Medical Evangelists  
George Washington University School of  
Medicine  
Georgetown University School of Medicine  
University of Georgia School of Medicine  
University of Illinois College of Medicine  
Indiana University School of Medicine  
State University of Iowa College of Medicine

Johns Hopkins University Medical School  
University of Kansas  
Long Island College of Medicine  
Louisiana State University Medical Center  
Marquette University School of Medicine,  
Indiana  
University of Maryland School of Medicine  
Meharry Medical College, Tennessee  
University of Michigan Medical School  
University of Minnesota Medical School  
University of Mississippi School of Medicine  
University of Montreal Faculty of Medicine  
University of Nebraska College of Medicine  
New York Hospital  
New York University College of Medicine  
University of North Dakota School of  
Medicine  
Northwestern University Medical School,  
Illinois  
Ohio State University College of Medicine  
University of Oklahoma School  
University of Pennsylvania School of  
Medicine

University of Pittsburgh (E. S. Magee Hospital)

Jefferson Medical College of Philadelphia (Penn. Hospital)

Queen's University Faculty of Medicine

University of Rochester School of Medicine

University of Southern California School of Medicine

Medical College of the State of South Carolina

University of South Dakota School of Medicine

Stanford University School of Medicine

St. Louis University School of Medicine

Syracuse University College of Medicine

Temple University School of Medicine, Pa.

University of Toronto Faculty of Medicine

Tufts College Medical School, Mass.

Tulane University of Louisiana School of Medicine

University of Utah School of Medicine

Vanderbilt University School of Medicine, Tenn.

University of Vermont College of Medicine

University of Virginia Department of Medicine

Medical College of Virginia

Wake Forest College School of Medical Sciences

Wayne University College of Medicine

University of Western Ontario Medical School

University of Manitoba Faculty of Medicine (Winnipeg General Hospital)

University of Wisconsin Medical School

Woman's Medical College of Pennsylvania

Yale University School of Medicine

In 1938, a survey was begun to determine the policy and the practice which the obstetrical teaching centers of the United States and Canada employ in the treatment of asphyxia neonatorum. Contact was made, carried on and completed as follows:

A copy of the last annual report was secured from every medical school.

A personal letter was written to the Professor of Obstetrics of each school requesting the following information:

(a) A review of methods now in use in the treatment of asphyxia neonatorum.

(b) A statement relative to research under way.

(c) A reaction to a suggested outline proposing a new classification of the stages of asphyxia and the treatment indicated.

*Below* is the form suggested as the basis for the rational treatment of asphyxia neonatorum.

The following stages of asphyxia are recognized as applying to Asphyxia of the Newborn:

1. Stage of Depression.
2. Stage of Spasticity.
3. Stage of Flaccidity.

### Physical Signs Accompanying Stages of Asphyxia

#### Depressed:

Baby does not breathe well.

Tendency to duskiness or recurring cyanosis.

Respiration free, but slow and irregular.

#### Spastic:

Irregular, gasping or shallow respiration occurring at long intervals.

Marked cyanosis of mucus membranes, with blotching of skin or general pallor.

The baby's gums close on the gloved finger tip.

There is reflex reaction to suction of the pharynx, such as movement of facial muscles or extremities.

If pharynx is exposed, pharyngeal reflex is sluggish or active and the glottic reflex is active.

Froth or fluid present in the mouth and pharynx.

#### Flaccid:

Respiration occurs at long intervals, or cannot be demonstrated.

Cyanosized or pallid.

Complete flaccidity of the musculature. All muscle tone gone.

Jaw completely relaxed.

No resistance to suction or exposure of the pharynx.

Fluid is found in the hypo-pharynx.

Apex beat may or may not be demonstrable.



## Indications for Relief of Physical Signs

On delivery, routine toilet should be practiced, including immediate suction, correct posture, and heat to the body.

### Indications for relief of 1st stage:

*Depression:* Administration of oxygen and CO<sub>2</sub> pending confirmation of diagnosis of the cause of depression. Heat supplied to the body and correct posture maintained.

### Indications for relief of 2nd stage:

*Spasticity:* Relieve obstruction to free respiration by suction and otherwise. Provide oxygen and CO<sub>2</sub> so that it may reach the glottis. Apply artificial heat and postural treatment.

Note: Artificial respiratory obstruction may be easily induced by the slightest pressure on the baby's face which tends to depress the lower jaw.

### Indications for relief of 3rd stage:

*Flaccidity:* Eliminate complete respiratory obstruction which has occurred as the result of flaccidity of airway by lifting the tongue from contact with the soft palate and pharynx. Examine the pharynx, remove fluid present by suction. Examine the glottis. If the vocal cords are relaxed and silent, introduce suction tube. Follow tracheal suction by insufflation of oxygen and CO<sub>2</sub> under controlled pressure for measured periods. On the first appearance of spontaneous respiration, follow this newly established respiratory rhythm with stimulating doses of oxygen CO<sub>2</sub> through a tracheal tube. When reflexes return, discontinue insufflation and provide oxygen CO<sub>2</sub> by inhalation, employing correct posture and heat. Insufflation may be accompanied by hypodermic or intravenous medication, directed to stimulation of the respiratory center.

## Comment:

Signed:

As a result of the request and two follow-up letters addressed to fifty and twenty-nine universities respectively, sixty-eight replies were received. Five of these sixty-eight universities offered only a two-year theoretical course, reducing the total available response to the obstetrical services of sixty-three medical schools.

Since the outline submitted offers a common ground for discussion, it will be of interest to break this down as follows:

General approval and disapproval by states.

Reaction to specific details by states including matter suggested by correspondence not included in the outline and deserving of emphasis. (Key number noted below refers to particular state.)

The following special references are noted and quoted references follow:

Use of Carbon Dioxide.

Use of Aspiration.

Use of Heat.

Use of Intravenous and Alpha Lobelin.

Lumbar Puncture and the Use of Whole Blood Injection.

Mouth to Mouth Insufflation.

Drugs for Respiratory Stimulation.

The Position of the Baby After Delivery.

The Use of Intracardiac Injections.

The Use of Indirect Intubation and Suction. Prochownick's Method of Artificial Respiration.

The Use of Indirect Intubation and Insufflation.

The Relation of Intracranial Pressure to Asphyxia.

The Post-operative Observation of the Baby. The Cause of Atelectasis.

The Circulation of Information to the General Profession.

Obstruction by Pressure on the Baby's Face. The Use of Mechanical Devices—E & J, Flagg, Kreiselman.

Research Now Under Way.

Reference to Euthenasia.

The Use of Sedatives in Obstetrics.

## States and Key Numbers:

California, 4, 5, 6  
 Colorado, 7  
 Connecticut, 8  
 Washington, D. C., 9, 10  
 Georgia, 12, 13  
 Illinois, 15, 18  
 Indiana, 19  
 Iowa, 20  
 Kansas, 21  
 Louisiana, 23, 24  
 Maryland, 25, 26  
 Massachusetts, 27, 29  
 Michigan, 30, 31  
 Minnesota, 32  
 Mississippi, 33  
 Missouri, 35  
 Nebraska, 38  
 New York, 40, 41, 42, 43, 46, 47  
 New Mexico, 4, 8  
 North Carolina, 50, 51  
 North Dakota, 52  
 Ohio, 53, 55  
 Oklahoma, 56  
 Pennsylvania, 59, 60, 61, 62, 63  
 South Carolina, 64  
 South Dakota, 65  
 Tennessee, 67, 68  
 Texas, 69  
 Utah, 71  
 Vermont, 72  
 Virginia, 73, 74  
 Wisconsin, 76  
 Delaware, 77  
 Alberta, Canada, 78  
 Winnipeg, 79  
 Halifax, N. S., 80  
 Kingston, Canada, 81  
 London, Canada, 82  
 Toronto, Canada, 83  
 Montreal, Canada, 85

Conclusions which may be drawn.

### General Approval and Disapproval of Outline

Eight universities objected to the outline proposed for the following reasons:

Considered incomplete.

Raised the question whether first and second stages were asphyxia.

Maintained that cerebral hemorrhage occurred before asphyxia.

Attention should be directed to prevention rather than treatment.

Attention should be directed to causes, sedation and anesthesia.

Suggests that the outline be limited to two stages.

No practical advantage.

Seven universities made no comment.

Forty-eight universities specifically approved the outline as submitted:

"Thoroughly in accord with your classification and treatment. I follow the same treatment in teaching." 62

"A good summary." 50

"I am in complete accord with treatment as outlined." 48

"Simple, sane, conservative." 12

"Concur in idea presented. Seems extremely sound. Would like reprint." 13

"Data as outlined meets in every detail with observation and treatment carried out in our institution." 23

"Have gone over whole outline with members of my staff and we feel that it is entirely correct. I am taking the liberty of retaining a copy for the information of our various residents and internes." 24

Certainly the Importance of Establishing Generally Accepted Principles Covering the Routine Treatment of Asphyxia Neonatorum is Urgently Necessary.

"I thought so highly of your outline for the rational treatment of Asphyxia Neonatorum that I am keeping it in my files on this subject." 38

"We feel that the brief outline suggested as a fundamental approach to the treatment of Asphyxia Neonatorum is a good one, especially because of its simplified classification." 43

"I agree with your questionnaire as a whole. I think the dissemination of such information in uniformity of treatment will be of great benefit in combating fetal mortality." 51

"A very good statement of present day knowledge referable to asphyxia of the newborn." 79

"I would personally compliment you on this simple and very rational classification and method of treatment which you have outlined for the asphyxia of the newborn. I like your classification so well that I think I will



adopt it. The form of treatment outlined is very similar to what we have been using for the past few years and have been highly delighted with the results. Again let me congratulate you on this splendid contribution on such an important subject." 82

### Reaction to Specific Details

The Use of Carbon Dioxide in Resuscitation.

A difference of opinion exists regarding the benefit to be derived from the use of carbon dioxide as a respiratory stimulant.

Since objection to the use of this gas is voiced by a relatively small but important minority, these opinions are quoted.\*

Ten of the sixty-three universities responding definitely object to the use of carbon dioxide. The following statements are on file as opposed to the use of CO<sub>2</sub>:

"We do not believe in the use of CO<sub>2</sub> mixtures in the resuscitation of newborn infants, since the asphyxiated infant is more than saturated with CO<sub>2</sub> and is suffering from oxygen lack." 1

"I am dubious as to the wisdom of using CO<sub>2</sub>." 9

"I agree heartily with the above (outline) except for the use of CO<sub>2</sub>. We feel that pure oxygen is preferable when artificial respiration is necessary. There is much experimental evidence to support this condition." 10

"We do not believe in the use of CO<sub>2</sub>." 18

"If the infant is apneic, it is felt that CO<sub>2</sub> is contra-indicated, regardless of whether the depression of the respiratory center may be due to drugs, anoxia or to excess CO<sub>2</sub> alone or together." 13

"In hearty accord with your efforts if we except the CO<sub>2</sub> question." 25

"I note that you include in your recommendations the employment of carbon dioxide and oxygen; and to the use of the former gas, as you know, I cannot agree." 25

"I still feel there is some question whether oxygen alone is not better than oxygen CO<sub>2</sub>." 42

"Only comment we had to offer was whether CO<sub>2</sub> should be administered with

oxygen in the state of flaccidity." 43

"We do not make use of the combination of oxygen and CO<sub>2</sub>." 76

On the other hand, fifty-three universities or eighty-four per cent specifically approve or voice no objection to the outline approving the use of carbon dioxide.

### The Use of Aspiration or Suction

If there is one point in the treatment of Asphyxia Neonatorum in which there is almost universal agreement (one exception reports) this is the removal of fluid or other foreign matter from the airway of the newborn infant.\*

Not only is there unanimity of opinion relative to the value of suction, eighteen universities having called attention to this, but a variety of methods are employed to accomplish this purpose. A widely used method of removing fluid from the trachea and pharynx is the so-called Stripping technic in which the baby is suspended by the feet and the trachea is massaged towards the mouth. Suction applied by the surgeon's mouth through a catheter fitted with a glass receptacle is common practice.

"We make sure that the air passages are cleared before any attempt is made at artificial respirations. As soon as the baby is born the escape of mucus and liquor amnii is encouraged by suspending the baby by its legs. At the same time the pharynx is cleared by suction, using a rubber ear syringe which is sterilized and included in the delivery kit." 1

"We use gentle cleansing of the mouth and posterior pharynx by oral suction with a soft rubber tube." 13

"Our management of asphyxia neonatorum includes immediate emptying of pharynx of mucus and fluid by tracheal catheter." 18

"We use a built-in suction apparatus attached to the bassinet which can be adjusted for weak suction making possible thorough aspiration of mucus without danger of damaging the delicate epithelium of the posterior pharynx and larynx." 25

"We aspirate mucus from the nose and mouth with ear bulb syringe as soon as head

\* The appearance of a new book dealing with the problem entitled "Adventures in Respiration" by Dr. Yandell Henderson, Williams & Wilkins Press, may serve to clarify the situation.

\* It will be recalled that this view was generally ignored ten years ago.

is visible, milk down the trachea as soon as the head is born. If necessary, introduce tracheal catheter and aspirate mucus from trachea placing child on table with head held over edge. We feel that plugging with secretion of the bronchial tree and aspirated mucus is one of the commonest causes of respiratory difficulties, and we use every effort to relieve this condition." 38

"We consider among the procedures of greatest value in the therapy of asphyxia neonatorum clearing the mouth and throat of mucus." 67

"The general emphasis on suction and tracheal catheters bothers me. All of these methods, including the use of carbon dioxide and oxygen, doubtless have a very valuable place but I foresee new difficulties on the basis of their promiscuous use." 30

## **Less Usual Is the Following Practice**

"As the clinical procedure for resuscitation I stress the freeing of the air passages of all mucus and secretions. I use a blowing technic that I have perfected through many years rather than the aspiration catheter, though some of my students prefer the latter." 55

## **Use of Heat**

Obstetrical clinics over the country are becoming thoroughly heat conscious and employ this in the treatment of asphyxia neonatorum. Twenty-two universities consider the application of heat to the child's body of sufficient importance to stress this point in their replies. Among these comments we quote the following:

"We have a very high premature death rate here. We cut it last year over the year before from sixty-three to fifty-two per cent, mainly I think by maintaining the body heat from time of birth to that of arrival at the hands of the pediatricians." 13

"It would seem advisable to stress more thoroughly the need for maintaining body heat . . . . . In severe cases we rely largely on preserving body heat through the use of hot tubs." 20

"Of the two single procedures which we feel are of greatest value in the therapy of asphyxia neonatorum we would select aspira-

tion of mucus and the application of heat." 67

"The maintenance of body heat cannot be overemphasized." 5

"In your outline no statement is made as to how heat is to be applied to the body or what the degree of temperature should be." 1

"Promptly after delivery the baby is wrapped in a sterile, dry, warm blanket." 69

"Every endeavor is made to keep the child as warm as possible. We do not use the hot and cold bath but sometimes the baby is put in a warm bath, leaving only the face exposed while CO<sub>2</sub> and oxygen or occasionally mouth to mouth insufflation is tried." 79

"We should handle a baby with extreme gentleness and maintain the baby in a warm temperature." 76

"The maintenance of body heat is often forgotten until too late." 40

"Wherever I have any foreknowledge of possible asphyxia I have a warm bath ready so that the baby can be put in it the moment it is born. This means in effect that whenever I put on forceps—no matter how low—wherever I have a breech, or any other abnormal presentation—whenever the labor has been protracted in a tight-fitting pelvis—wherever there are signs of a failing fetal heart, the bath is ready and waiting to receive the baby. I feel very strongly that this is the most vital part of my treatment.

"I do not see the sense in resuscitating a baby that is going to die a few hours or a few days later because its body heat has been allowed to fall too far in the first half hour after birth, and I therefore feel that my main criticism of the scheme you lay down is the neglect to stress this most important point. I would not only put it before all your other steps, but I would put it in the largest capitals you have. And what is more, I would like to stress the point that the bath should be ready and waiting when the baby is born." 80

## **Intravenous Medication**

Reference is made by fourteen correspondents to experience in the use of intravenous medication with special reference to alpha lobelin.

"Am persuaded that alpha lobelin into the umbilical vein is of a valuable help. There



seems to be some difference ré use but I am convinced that after ten years' use of it that it does the trick in a certain percentage of cases." 80

"We resort to the administration of oxygen CO<sub>2</sub> under controlled pressure for a measured period. The percentage of CO<sub>2</sub> being five per cent. Should this method fail to resuscitate the infant, alpha lobelin is then administered, one twentieth grain injected into the umbilical vein as prescribed by Dr. Robert A. Wilson of New York City." 23

"We are under the impression that alpha lobelin is of value in the second and third stage." 6

"If the baby is doing badly, 1cc of alpha lobelin is injected into the cord vein before the baby is cut off." 74

"In those cases in which there is respiratory failure we use alpha lobelin." 15

"In cases of delayed respiration we inject alpha lobelin or coramine directly into the vein of the umbilical cord and milk it towards the baby's abdomen. We are not sure that these drugs are of any value but we are of the opinion that they do help in initiating respiration." 24

"I believe that there may be some value in the addition of alpha lobelin or metrazol in certain cases." 31

"We give alpha lobelin in the hope of stimulating respiration." 38

"Occasionally alpha lobelin is injected into the umbilical cord and then gradually milked into the circulation as needed." 1

"Would urge caution in the use of hypodermic or intravenous respiratory stimulants unless cardiac stimulants are also available. This applies particularly to alpha lobelin." 52

"Most, if not all, drugs used to stimulate respiration are valueless. Certainly we have found this true of alpha lobelin." 40

"I have yet to see a single baby benefitted by the intramuscular or intravenous injection of drugs." 21

"I do not believe that intravenous medication is practical except through intra cardiac injection or into longitudinal sinus." 18

"Between the years 1925 and 1927 I used alpha lobelin routinely in the treatment of asphyxia neonatorum but stopped after having lost two infants from convulsions and I

have reason to believe that they were the result of alpha lobelin. Autopsies showed no organic causes for these convulsions. You will note that even enthusiastic authors admit that alpha lobelin produces opisthotonus." 25

"I am not convinced that some of the respiratory stimulants, such as alpha lobelin, are valuable." 18

### **The Use of Lumbar Puncture Is Referred to as Well as the Injection of Whole Blood to Reduce Cerebral Hemorrhage**

"If we suspect intracranial hemorrhage we usually employ lumbar puncture with the administration of whole blood into the buttocks of the baby." 76

"The clotting time on the baby is taken and if over five minutes by our method the baby is given an injection of 10cc of blood to try to control cerebral hemorrhage because that, we believe, is a very common cause of asphyxia." 74

"At times we practice a spinal or cistern puncture hoping by that to relieve pressure on the vital centers. There is some difference of opinion particularly on the part of the pediatrician as to the advisability of this procedure but I personally feel that at times a baby has been saved by spinal or cistern tapping at this time." 24

### **Mouth to Mouth Insufflation Is Well Established and Generally Recognized**

This is especially useful where mechanical methods have not been adopted or are not available.

One of our correspondents refers to this technic in no uncertain terms.

"Mouth to mouth insufflation properly used is much more valuable than any machine yet devised." 40

"If simple apparatus is not available we employ mouth to mouth insufflation covering the baby's mouth with gauze, holding the nose to prevent reflux and extending the head in order to establish a free airway." 24

"We are still employing mouth to mouth insufflation. I am acquainted with several drawbacks of this method but it possesses a great advantage of requiring no apparatus



and being available on a moment's notice. Our staff are given instructions in regard to the force of breath equivalent to 14 cm of water and are urged never to exceed it." 25

"I lay more stress than you apparently do to mouth to mouth breathing and to artificial respiration by compressing and relaxing the thorax with the babe held in the inverted position, the head resting on the table to prevent extension." 55

"It might be noted that when pure CO<sub>2</sub> is not available mouth to mouth respiration is a substitute of some value if properly done." 83

### **A Number of Institutions Employ Drugs for Respiratory Stimulation**

"Metrazol may help. We are proceeding slowly with our experiments with this drug." 40

"Coramine and caffeine are occasionally used." 8

"I have not seen any wonderful results by hypodermic injections." 27

"Our experience with drug medication has not been very good and consequently we use it rarely.

"Adrenalin, alpha lobelin and coramine are rarely employed except in very severe asphyxia where the results of our administration are not particularly good." 20

"We employ alpha lobelin and adrenalin injected directly into the musculature of the heart as a measure of last resort." 67

"We rarely use hypodermics as respiratory stimulants." 69

### **The Position in Which the Newborn Baby Is Placed After Delivery Is Considered of Importance by a Number of Our Correspondents**

"It would seem advisable to define correct posture." 20

"I would state definitely what you believe to be the correct posture in which these infants should be placed." 46

"I feel that the correct posture should be explained for those unfamiliar with it." 51

"The child is kept on its right side immediately after suction." 59

"Immediately after delivery the infant is

maintained in a posture with the head slightly below the level of the body." 61

### **Intracardiac Injection for Resuscitation Is Recommended as a Last Procedure**

"Adrenalin is injected into the right auricle if cardiac arrest is present." 13

"Intracardiac administration of adrenalin is reserved for desperate cases." 18

### **Spanking, Tubbing in Hot and Cold Water and Holding by the Feet Are Referred to**

"We still conform to some of the older methods, thumping of the soles of the feet gently and a mild or brisk rubbing of the back of the child while in the vertical position." 23

"Avoid suspension by the feet if cerebral hemorrhage is suspected." 38

### **Indirect Intubation**

Indirect intubation by manual palpation accompanied by suction according to the method of de Lee is widely practiced as may be noted from the fact that it is referred to by seventeen universities. We quote a number of these comments:

"If cardiac action does not improve, tracheal catheter is introduced and suction made, removing all fluid from the upper respiratory tract." 18

"We also aspirate mucus from the pharynx but rarely resort to tracheal catheterization." 20

"If respiratory efforts are made and it is apparent that air is not entering the lungs, the trachea is cleared with an intratracheal catheter according to the de Lee method." 24

"We do not have any instruments except the tracheal catheter for clearing the passages." 27

"The creation of a clear air passage, if possible, is absolutely necessary and can be accomplished in the great majority of cases without the use of a tracheal tube. The use of the latter by other than the most experienced is dangerous. Rarely do we find it necessary." 40

"We recommend blind passage of intra-

tracheal catheter with index finger. Laryngoscope never found necessary." 67

"We use a catheter attached to a glass mucus trap for sucking the mucus out of the air passages." 69

"We have a tracheal catheter if ordinary suction does not seem sufficient." 79

"I have found that my house staff can be easily taught to introduce a soft rubber catheter into the trachea under the sense of touch." 1

"The general emphasis on tracheal suction and catheters bothers me. I am inclined to believe that inexperienced and unqualified individuals will in time do considerable harm if they become enthusiastic about such procedures." 30

PROCHOWNICK'S METHOD of artificial respiration is referred to by two universities although the method is undoubtedly practiced by many schools.

"I would suggest the inclusion of Prochownick's method of resuscitation in the first and second stages." 48

"In most cases we find that cleansing the throat of mucus and applying gentle rhythmic pressure over the chest with the newborn held by its feet and the head extended (Prochownick's method) will resuscitate most of the asphyxia cases in the stages of depression and spasticity." 67

### Direct Intubation

Direct exposure of the larynx by laryngoscope according to the Chevalier Jackson method of intubation and suction and insufflation as recommended by Flagg are both condemned and approved.

"I believe that examination of the pharynx and glottis which requires the use of a suitable piece of apparatus is beyond the ability of the average physician, largely because he does not possess such a piece of equipment." 1

"I fail to see when an inspection of the glottis has anything to do with the treatment of these cases. While we do not have one, there is a bronchoscope in use for premature infants that is inserted by sight due to the fact that the premature baby's throat is so small that it is almost impossible without doing a great amount of harm to insert the tracheal catheter in the usual manner. After

insertion of this bronchoscope the catheter is passed through it into either bronchii. This is exceptionally useful in the treatment of premature infants. It requires no great amount of training for its use." 15

"I do not believe inspection of the larynx and the vocal cord are practical in the average delivery room during delivery by an interne, general practitioner or obstetrician." 18

"We tried the bronchoscope but on the recommendation of the pediatric section we have discontinued anything which would cause an inflammatory action." 27

"Close at hand in each delivery room are the E & J respirator and the Flagg respirator. The Flagg apparatus is used routinely when spastic obstruction is present and the E & J respirator and Flagg apparatus are applied when necessary and air-way is often used with the E & J." 59

"All treatment is stopped when the reflexes return and when respiration is established and in those which falter, constant observation and administration of CO<sub>2</sub> and oxygen are given at measured intervals. In addition, I am giving our figures compiled by the Chief of the Pediatric Staff over a period of seven years. These were 15,488 deliveries and 944 baby deaths, a fetal mortality of 6.1% and a corrected fetal mortality of 2.6%; there were 4,062 private cases and 98 baby deaths or 2.4% with corrected fetal mortality of .98%." 59

"I personally am convinced that it is seldom necessary or advisable to invade the trachea with a metal tube and apply strong mechanical suction." 63

"We use the Flagg apparatus and like it." 7

### Asphyxia and Cerebral Hemorrhage

There is much difference of opinion concerning the sequence in which asphyxia and cerebral hemorrhage take place. The opinion is repeatedly expressed that intracranial hemorrhage occurs independently of, or is the cause of, asphyxiation.

"One of the most important factors to determine in this whole subject is the relative importance of the asphyxia as the cause of death or some other condition, such as cere-



bral hemorrhage, which produces the asphyxia. The present statistics on asphyxial death in the newborn are absolutely worthless. We are showing that twenty-five per cent of the neonatal deaths, if carefully autopsied, are due to cerebral hemorrhage. It is probable that no amount of management of the asphyxia will greatly influence the outcome in these cases." 18

"Any discussion of asphyxia in my opinion should not fail to take into account the fact that many babies delivered instrumentally are really suffering from intracranial hemorrhage which may be the main factor in the case. This is particularly true, of course, as regards difficult forceps delivery or breech extraction. Of course premature babies are particularly liable to intracranial hemorrhage. We have even noticed this complication in some babies delivered by caesarian section. Some of these can be explained by the fact that the mother had been in labor for a considerable time before the section was performed, with pressure of the fetal head above the pelvic brim. For others, no other explanation seems to be forthcoming." 24

"I might say that I have become intensely interested in the late effects of asphyxia resulting in cerebral anoxemia. Our interest has been particularly aroused by work of Schriber, Journal, Michigan State Medical Society, Feb., 1938, as to the possible late end results in infant suffering from this condition." 31

"The pallid, flaccid type of asphyxia will rarely respond to treatment even if it does, the eventual outcome is doubtful since most of these babies have suffered intracranial hemorrhage." 40

"The most difficult problem is to determine whether one is dealing with asphyxia alone or intracranial hemorrhage." 42

"I am convinced that the picture described under stage three is in the vast majority of instances associated with an underlying intracranial hemorrhage." 46

"In the few cases in which asphyxia does occur we believe that the first efforts should be made to determine whether there is intracranial damage or not. If we suspect the former we usually employ lumbar puncture and the administration of whole blood into the buttocks of the baby." 76

"It is my opinion that some cases of still birth following the flaccid type and not coming to autopsy are really due to intracranial injury." 83

"Experience in numerous autopsies have demonstrated that the cause of asphyxia is a large or a small cerebral hemorrhage." 85

### **Post-Operative Observation**

An important factor in the treatment of neonatal asphyxia is continuous post-operative observation of the baby. This point is referred to as follows:

"Would suggest specific instructions for observation for some hours after birth." 50

"Constant observation is recommended." 59

### **Atelectasis**

A reference dealing with atelectasis, an extremely interesting and important problem in connection with asphyxia is noted.

"One group of cases of asphyxial deaths which particularly concerns me are those babies born spontaneously or by caesarian section which appear normal at birth, cry lustily, are a good color when sent to the nursery, who within a few hours develop a cyanosis and respiratory difficulty and who die apparently from this cause. Post-mortem in these cases shows marked atelectasis. This degree of atelectasis probably did not exist shortly after birth. Why it developed I have not determined. I am sending a group of newborns to the X-Ray Department for lung pictures in order to throw some light on the expansion of the air sacks in the first few hours of life." 18

### **General Information to Be Disseminated**

A number of our correspondents feel that it is desirable that certain general information should be widely circulated. Specific recommendations are noted as follows:

"To spread broadcast the technic of some relatively simple program such as you recommend is most commendable; and efforts along this line should be pushed, it seems to me, as much as possible." 25

"Would like to see you eliminate:

1. Ancient resuscitation methods from modern textbooks.

2. Those awful resuscitation basins from delivery rooms.

3. Haphazard hypodermic cardiac stimulation.

4. Intracardiac injection.

5. Routine holding up of babies by feet.

6. Alpha lobelin." 41

"Suggestions:

1. I feel that the correct posture should be explained for those unfamiliar with it.

2. Call attention to certain don'ts; such as, Do not manipulate or strike the baby too vigorously in attempting stimulant or respiration.

3. Use tracheal tubes with caution." 51

"The reader is specifically referred to the results of a questionnaire suggested by the Chicago Board of Health." 67

"Frankly it seems to me that in such a report the emphasis should be placed on prevention rather than cure. I am convinced that if proper obstetric diagnosis and care employed together with good judgment in the use of analgesic and anesthetic agents there would be very little need for the active treatment of asphyxia neonatorum. Furthermore, auscultation of the fetal heart in the second stage of labor with judicious control of the oxygen and carbon dioxide content of the mother will render the number of asphyxiated babies so small that there will be little opportunity to put into practice means of treating asphyxia . . . . . I am firmly of the opinion that this is where the emphasis should be placed and it seems to me one of the most neglected phases of modern obstetrics." 76

### Pressure on Lower Jaw

The importance of obstructing the baby's airway by making pressure upon the lower jaw with a mask is noted.

"We emphasize as you do that artificial respiratory obstruction may be easily induced by the slightest pressure on the baby's face which tends to depress the lower jaw." 5

"Keep the baby's lower jaw well forward." 15

"If the note under Indications for Relief of 2nd Stage implies that artificial respiratory obstruction is frequently induced by the

slightest pressure on the baby's face which tends to press the lower jaw, I must disagree, since in my experience the overwhelming majority of these cases respond to the passage of a tracheal catheter in the usual manner which necessitates inserting the finger in the mouth and pressing the lower jaw. I feel that the danger in attempting not to clear the upper pharynx is greater than the danger of producing artificial respiratory obstruction in these cases." 18

### Specific Apparatus

Since specific references to apparatus known by name are made in a number of cases we note these references:

"We had one of the first Drinker respirators that was made but have disposed of it, since we did not find it of any benefit. The difficulty seems to be that the machine operating at a regular rate of speed could not be adjusted to the respirations of an infant which, as you know, are extremely irregular at birth." 1

"The use of the small Drinker respirator has been helpful in the relief of the third stage of asphyxia." 6

"The using of various mechanical respirators, such as the Drinker apparatus and others, may prove of value when available." 18

"In some cases especially as regard premature babies we have employed the Drinker apparatus and feel that we have occasionally saved a baby's life in this way." 24

"As to the use of methods of resuscitation, permit me to say that in addition to the usual methods of artificial respiration we also have the Drinker respirator. I am sorry to say that the mechanical respirators which we have used, and we have probably used each one of them as they have appeared and been discarded, we have not been greatly impressed by them. We have found these machines valuable only in maintaining the respiration after breathing has been established." 32

"We have practically given up the Drinker respirator and use it only for those cases which continue to have respiratory difficulty, namely atelectasis and weak, puny infants whose respiration falters while in the nursery and in the early days of their existence." 59



"If breathing does not begin immediately the infant is placed in a Drinker respirator and is given artificial respiration continuously until the normal rate of respiration is inaugurated or until death takes place. This is indicated by periodic examination of the heart sounds. During the treatment in the respirator a face mask covers the infant's face and it is permitted to breathe a mixture of carbon dioxide and oxygen. The treatment is the same regardless of the apparent degree of asphyxia." 61

"We recommend the Foregger or Drinker respirator for artificial respiration in the hospital." 67

"We have been using the E & J resuscitator for the past six years. We feel quite certain that we have saved one life and possibly two or three others during that time." 21

"Close at hand in each delivery room are the E & J respirator and the Flagg respirator." 59

"We use the E & J resuscitator which has given excellent satisfaction." 63

"In extreme cases the Kreiselman machine is used." 1

"The Kreiselman apparatus is obviously suitable only for hospital use." 25

"We have been using the Kreiselman apparatus for the past two years in the treatment of asphyxia neonatorum. It seems to us to supply the four main desiderata, proper posture, aspiration of mucus, the delivery of oxygen under measured pressure and warmth." 25

### **Reference Is Made to Researches in Asphyxia Neonatorum Now Under Way**

"Our assistant pediatrician is conducting a somewhat extensive piece of research on exchange of gases through the placenta." 1

"Research under way: Determination and comparison of maternal oxygen tension to fetal oxygen tensions when Barbiturate and Hyoscine Amnesia employed in delivery." 13

"Studies in intra-uterine respiration and the effect of various types of anesthesia on this phenomenon. We have been hoping to get under way a study dealing with the efficacy of various methods of insufflation in producing expansion. This would have to be

carried out on stillborn infants and presents certain technical difficulties which we have thus far not been able to circumvent." 25

"At present we are undertaking an investigation bearing directly upon the problem of asphyxiation. Earlier in the year, however, we carried on some unpublished clinical experiments on the effect of morphine administration to the mother in labor. As a result of this work, we are more than ever persuaded that morphine rarely has any harmful effects and that it has unjustly developed a bad reputation as an agent likely to produce fatal asphyxia. It is likewise the opinion of the staff that any possible morphine effect on the baby is rarely, if ever, fatal." 20

"Children whose mothers have had some form of analgesia during labor seem more prone to develop cerebral anoxia. We think that possibly this may be due to a lowering of the metabolic rate during labor under that which we would normally expect in a woman without analgesia, and we are attempting now to set up a normal by taking metabolic rates on patients actually in labor without analgesia." 31

"A report on infant autopsies." 46

### **One Reference Is Made to What Might Be Referred to as Eutha- nasia in Asphyxia Neonatorum**

"Sometimes I wonder how justified we are in stressing procedures for resuscitating babies. If we assume that the more severe grades of asphyxia are commonly associated with intracranial lesions there is certainly some doubt as to whether these babies should be saved. Certainly when there is definite evidence of intracranial hemorrhage it may be better for everyone concerned if they are permitted to die peacefully, rather than to make them burdens to themselves and to their community. No doubt you have given thought to the hard-boiled philosophy in such a suggestion." 20

### **Sedatives to Mother**

Indirect reference to sedatives given the mother have already been noted. However, the following comments stress the situation directly.

"We feel that it is important not to give morphine to the mother in the last three or four hours of labor, fearing that it will depress the baby's respiratory center. Consequently we **do not employ** it previous to the performance of caesarian section. We do not feel that the barbiturates which are so widely employed at the present time when properly administered give any particular difficulties in regard to the resuscitation of the baby. Ether when given to the surgical degree does appear to effect the baby to some extent but it has never done so to an alarming degree in our experience. We never employ it in an operative obstetric case except when we are unable to obtain a skilled anesthetist or when apparatus is not available, such as is the case in obstetrics performed in the home. Our preference is for ethylene oxygen as an obstetrical anesthetic." 24

"First, while asphyxia neonatorum will always be with us, I wonder if we haven't got the cart a bit ahead of the horse in emphasizing asphyxia when perhaps we might be placing the emphasis on the factors which produce asphyxia with particular reference to over-sedation." 30

"I am impressed by the fact that the conduct of the labor and the use of drugs for relieving the pains of labor are large factors in asphyxia. I feel that there should be a special investigation of the cases in which the various drugs have been applied in the production of so-called painless labor. I think that one of the objections to the indiscriminate use of such drugs for the relief of pain is reprehensible, and in any research on this problem this should be a prominent feature." 32

"It is my belief that the two predominant causes of asphyxia neonatorum are: First and foremost, injudicious and unwise attempts at analgesia and anesthesia; and secondly, the inordinate amount of operative deliveries that are done in the country as a whole. The two subjects are so intimately interrelated that it is usually impossible to separate them. In other words, excessive drug therapy of various kinds is being employed which so interferes with the normal process of labor as to render operative delivery more or less the rule. For example, just recently I heard a prominent obstetrician

connected with a well-known medical society, in which he advocated large doses of nembutal. He admitted that the dosage was so great that it was necessary to complete the delivery by forceps in almost every instance. I cannot help but believe that these two factors are responsible for the large incidence of asphyxia neonatorum.

"Our practice here is to give our patients as much relief in labor as we can consistent with the normal progress of labor and this we accomplish in the first part of the first stage by the use of heroin; in the latter part of the first stage and throughout the second stage the use of intermittent nitrous oxide oxygen, maintaining the oxygen at a high level, especially for the few moments before the birth of the baby. Of course, we have to vary our technic with the individual patient, but I have outlined the management of the average case on our hands. The result is that labor is not unduly prolonged, operative incidence is not increased, and rarely is it necessary for us to use artificial means to establish normal respiration.

"I would not have you believe from the above that we are entirely satisfied with our methods of pain relief in labor. While I wish we could afford more relief to our patients than they now obtain, and I believe that the day will come when that will be possible, I am satisfied that we are not jeopardizing the baby's welfare and neither are we increasing our incidence of operative deliveries." 76

"I am also impressed with the fact that the conduct of the labor and the use of drugs for relieving the pains should be a special investigation of the cases in which the various drugs have been applied in the production of so-called painless labor. I think that one of the objections to the indiscriminate use of such drugs for the relief of pain is reprehensible, and in any research on this problem this should be a prominent feature." 32

"We use no pituitary extract during labor. We use no scopolamine and no barbiturates. For twenty-five years it has been well accepted that 30% of all babies born in twilight sleep labors show some degree of asphyxia. Fritz Irving's article on the barbiturates some two years ago showed exactly the same figures (30%). Without making a careful survey of our own results, it is my opinion that



we do not have more than 3%, including the complicated as well as the uncomplicated asphyxia. I think it is high time that the American Medical profession should receive a *scathing denunciation* of twilight sleep and all similar procedures. It seems to me that your committee is in an excellent position to render a real service of this sort. The only defense that I have ever heard a physician give for the use of such procedures is that they were "Business getters." 21

NOTE: Endotracheal intubation and suction may be said to be practiced by two distinct schools. The first employs palpation and blind intubation. It corresponds to the technic popularized by Joseph O'Dwyer in his treatment of diphtheria fifty years ago. The second employs direct vision by the use of a laryngoscope and corresponds to the technic employed by Chevalier Jackson in per oral endoscopy. Endotracheal suction is indicated and should be practiced only in advanced spasticity and flaccidity. In spasticity suction may be necessary to relieve glottic obstruction from mucus or amniotic shreds. In flaccidity tracheal fluid may demand removal. It is difficult to remove shreds of mucus or pools of fluid which cannot be seen. It is an entirely non-traumatic procedure to laryngoscope and intubate a flaccid baby.

Exposure of the field and treatment under direct vision in the case of asphyxia neonatorum will very likely follow the course pursued in the case of diphtheria where blind intubation has given way to direct methods as familiarity with the structures involved and the technic employed becomes generally understood.

### Comments

The foregoing material is exceedingly significant because of the extraordinary educational influence which it represents. The directors of the leading obstetrical services in the United States and Canada have, by their thoughtful response to the queries addressed to them, indicated a nation-wide interest in the problem of Asphyxia Neonatorum. The writer, in assembling and presenting the material, is merely co-relating the position of leading teaching centers on the subject. He has in this capacity attempted to report the statements of record

without unduly emphasizing those factors which might be of particular interest to him.

In commenting upon the conclusions to be drawn, he has attempted to bring to a focus points of acceptance and differences which are sharply marked. He has taken the liberty to add notes based on his clinical experience in this field.

Returning to the general outline as a focal point about which conclusions may conveniently be assembled, the following facts may be noted:

The outline presenting the stages of asphyxiation, including the physical signs characteristic of each stage, have been found acceptable by more than eighty per cent of the universities contacted. In view of this approval and acceptance by the leading medical centers of the country, is it too much to hope that the medical literature dealing with this subject may adopt this classification for common usage?

Turning to the indications for and the specific method employed for the treatment of each stage, we find that the common practice exhibits differences of opinion.

The first and the most important point of discussion is in connection with the third stage of asphyxia, flaccidity.

The point is taken by some that the stage of flaccidity formerly referred to as Asphyxia Pallida is primarily shock, which may have no relation to asphyxiation but is closely associated with cerebral hemorrhage. Perhaps this point may be illuminated by proposing the question "what physical signs follow the stage of spasticity?" In asphyxia from other etiological causes, the picture presented by the stage described as flaccidity supervenes. We find this in asphyxia from submersion, from anesthetic accidents, etc. The test of this condition lies in treatment. The writer has personally treated the flaccid newborn infant with nothing but artificial respiration by endotracheal insufflation and relieved the condition, rescuing the child.\*

Closely allied to this problem is that of cerebral hemorrhage in the newborn. Many schools favor the theory that cerebral hem-

\* See "Asphyxia Treatment in the Adult and in the Newborn."—Archives of Otolaryngology, 12:23-30, 1930.

orrhage is caused by instrumental delivery and antedates asphyxia.

Faced with intracranial hemorrhage in the baby delivered by caesarian section, this theory offers no explanation.

While the clotting time of the blood is noted and checked by lumbar puncture in some clinics, no reference has been submitted concerning a prothrombin deficiency and the use of Vitamin K in the mother before delivery.

From the mechanical point of view, the theory that intracranial hemorrhage is merely an expression of increased venous pressure due to asphyxiation provides a reasonable explanation for the intracranial hemorrhage which occurs without trauma, i. e., caesarian delivery. The frequency of intracranial hemorrhage in the premature, in which the thin-wall blood vessels are more liable to rupture, may also be explained from this point of view. The clinical picture of asphyxia neonatorum in the stage of spasticity requires little imagination to extend the ecchymosis mottling of the skin to a cerebral site where it cannot be seen but where its effects may prove fatal and appear in later life as mental derangements. The work of Schriber which has been referred to in this connection is of much interest.

Impinging upon the clinical picture of intracranial hemorrhage is that demonstrated by ante- or neonatal atelectasis. This field invites extensive research. Whether the situation is a developmental deficiency or a mechanical failure to distend the air sacks is an open question, particularly in the premature. An infant lung which it was not possible to insufflate by a pressure of 25mm mercury endotracheal for a period of five seconds in situ and which was born atelectatic was easily insufflated under water at post-mortem. The writer has repeatedly emphasized the need of research directed to a series of newborn infants in which endotracheal insufflation could be practised under fluoroscopic examination, an X-ray record of the progress made kept for record and a vital capacity tidal volume of air measurement used as a check.

There is an urgent need for an air-conditioned cabinet providing known mixtures of oxygen  $\text{CO}_2$  under constant qualitative check

and providing adequate heat, humidity and visibility.

There is a general agreement regarding the necessity of early and thorough aspiration of the infant airway. This seems to be particularly desirable in the breech podalic or caesarian delivery. In these cases the compression effect on the chest occurring in vertex birth which expresses much of the pulmonary secretion has failed to operate.

Snyder's demonstration of intrauterine respiratory movements suggests that amniotic fluid may be a normal condition within the respiratory tree, that the respiratory efforts may propel a fluid wave instead of the tidal volume of air occurring after birth.

The relief of fluid by suction is carried out by technic which varies with the individual clinic. Common practice encourages the use of a rubber catheter operated by the surgeon's mouth. This catheter introduced into the mouth and pharynx is useful in removing fluid with which it comes in contact. The method of de Lee in which the catheter is passed into the glottis by blind intubation is a source of much satisfaction to many surgeons. Familiarity with the size and the position of the glottis and the strength of the glottic reflex, except in flaccidity, strongly suggests that much of the so-called blind endotracheal suction is in reality esophageal suction. The glottis of the newborn baby of seven or eight pounds whose laryngeal reflex is still active presents resistance to a three-millimeter smooth metal tube. An attempt to intubate a flexible rubber catheter demonstrates the ease with which the tip of the catheter is deflected into the esophagus. The finger of the average operator, furthermore, presents a diameter which is larger than the infant laryngoscope. The trauma of manipulation to accomplish blind intubation may very well injure the fauces and the soft palate. During this manipulation the baby's respiration is, of course, completely obstructed by the foreign body presented by the finger and by the rubber catheter which completely fills the glottis. Operators familiar with the use of direct exposure by an illuminated laryngoscope presenting as it does facilities for the examination of glottic aperture, amniotic shreds, etc., are inclined to compare the technic of



blind intubation with the routine technic advocated by James O'Dwyer fifty years ago in the treatment of diphtheria.

Per oral endoscopy in the flaccid newborn can be taught to a student as readily as can blind intubation. The results are those of precision instrumentation as opposed to surgery limited to tactile manipulation.

### **The Use of Heat Is Vital in the Treatment of the Newborn**

Its use in the form of a bath is urged. Avoidance of drafts, avoidance of the heat of an intense light upon the newborn skin and avoidance of the pressure of blankets for protection are to be noted.

Blankets heated for the use of the baby should not be put in a warmer which renders them absolutely dry as the static spark and fire hazard is a common danger where inflammable anesthetic gases are in use.

An understanding of the value of skin stimulation as compared with other means of stimulation to provoke respiration would do much to eliminate the hot and cold tubbing, spanking, rubbing of the back, slapping of the soles of the feet, etc.

A profoundly asphyxiated infant can be expected to respond to such form of irritation in just about the same manner as one might expect a patient anesthetized for a laparotomy to respond. The anesthesia produced by the asphyxia is certainly as profound. The indications are, as has been noted in the outline, to stimulate the respiratory center by carbondioxide simultaneously supporting it by oxygen. The vitalization of the respiratory center is immediately followed in orderly sequence by the return of the more superficial reflexes and recovery ensues.

It is quite immaterial by what apparatus or by what means one introduces oxygen and CO<sub>2</sub> into the respiratory tree provided this actually takes place. Blowing oxygen into the baby's mouth or covering the mouth and nose with an oxygen mask is nothing but an idle gesture if the gas delivered does not actually find its way into the trachea and bronchii. Babies which survive with this treatment do so in spite of it and because of their inherent vitality rather than because of it. The school which employs direct laryn-

goscopy and intubation for suction is convinced that the only sure way to place oxygen in contact with the respiratory alveolae is to place it past all obstruction directly into the trachea. The immediate results of this treatment with these clinics have repeatedly confirmed these views.

An important point is brought out in the necessity for close post-operative observation of the baby who has been asphyxiated. He cannot be casually abandoned to nursing care. He should not be placed in an incubator with solid walls where it is difficult for the nurse to see him as she goes about her duties. Adequate illumination of a correct temperature curve (full spectrum) should fall upon the baby.\*

He should not be put in a nursery where daylight is reflected from green walls to his skin. Such illumination destroys the color value and the variations which should be noted.

The position of the baby should be such as to encourage the best possible respiratory ventilation. He should never be placed on his face.\*\*

Where atelectasis is suspected, placing the baby on his right or left side will result in less expansion than if flat on his back. The side position is useful, however, in preventing aspiration in very ill babies who regurgitate fluid. Respiratory expansion should not be embarrassed by the use of tight umbilical binders, bands or other clothing.

In the absence of mechanical means of artificial respiration mouth to mouth insufflation is commonly practiced and offers relief. The difficulty at once apparent to the operator familiar with the newborn infant glottis is the resistance offered by this tiny aperture to the entrance of insufflated air in comparison to the absence of resistance present in the wide-open esophagus. There is no doubt but that the greater part of the insufflated breath of the operator distends the baby's stomach instead of the lung. To this, of course, is added the danger of the insufflation of fluid from the baby's pharynx into his airway and contamination from the operator's mouth. In the absence of all other means of adequate insufflation there is no

\* "Color in the Operating Room." *Modern Hospital*, June, 1939.

\*\* See Miller's Synchronous Pneumograph.

doubt that this method should be practiced.

A number of universities have noted experience with intravenous and other types of medication. There is marked difference of opinion in the case of alpha lobelin. It may be concluded that a drug selected may be used as an adjunct, certainly never as the sole means of re-establishing the intra-uterine respiration of the baby who has just been delivered. The implication that a hypodermic will produce resuscitation per se is dangerous, for it may frequently delay the use of methods better calculated to bring about the desired result.

Intracardiac injections are used as a last resort. In this connection it is of interest to refer to the electric Pacemaker of Hyman by means of which an auricular impulse is stimulated by a bipolar needle activated by an intermittent current which is injected into the right auricle. See "Resuscitation of the Stopped Heart by Intracardial Therapy" by Albert S. Hyman. *U. S. Naval Medical Bulletin*, Volume 33, No. 2.

A number of universities urge the popularization of the matter which has been submitted with emphasis upon the prevention rather than the treatment of asphyxia. There is a strong feeling expressed by an important group among our correspondents that sedatives to the mother are responsible for much of the asphyxia neonatorum which is met and that the elimination or the reduction of this routine sedation will do much to prevent asphyxia. Since this impression has become generally recognized through many press releases it need not be stressed.

In view of the great interest in the subject of asphyxia neonatorum the need for research can scarcely be overemphasized. Research is urgently needed at this time to throw light upon the question of atelectasis to produce suitable equipment for asphyxia neonatorum in the premature, to throw light upon the problem of intracranial hemorrhage, to reduce the use of maternal sedation which acts to depress the baby.

## Conclusions

It is found that carbon dioxide with oxygen is in general use; that aspiration is regarded as essential to the treatment of the baby; that the use of heat is frequently

overlooked but should always be applied to protect the baby from exposure.

Sharp differences of opinion exist regarding the use of alpha lobelin and other drugs as respiratory stimulants.

Where intracranial hemorrhage is suspected, lumbar puncture is advocated and the use of whole blood injected into the buttocks of the baby is recommended.

Mouth to mouth insufflation is commonly employed as a method of artificial respiration where mechanical facilities are not available. The position of the baby after delivery is considered important. Intracardiac injections are used as a last resort but are not popular. The use of blind intubation in accordance with the technic of de Lee is common practice in many clinics. The technic of direct laryngoscopy, intubation, suction and insufflation is not generally understood or applied where indicated. Prochownik's method of artificial respiration is referred to. Confusion exists as to the sequence in which intracranial hemorrhage occurs; it is claimed as both a cause of and a result of asphyxia. It is recommended that the baby who has shown signs of asphyxia be carefully observed after return to the nursery.

The important question of atelectasis is raised and the need of research indicated. There is a strong sentiment to popularize certain general information relative to asphyxia neonatorum to the profession and to the public with special reference to the practice of frequent sedation administered to the mother. The danger of respiratory obstruction by the pressure of an inhalator mask on a baby's face is noted.

Experience with the use of mechanical methods including the Drinker, E & J, Kreiselman and Flagg equipment are referred to.

The solitary reference to Euthenasia in Obstetrics is noted for the purpose of condemning it.

Research on the problem of Asphyxia Neonatorum in the various universities in this country and in Canada is noted and found to be entirely inadequate for the problem confronted.

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## *Pyelitis in Pregnancy\**

By THEODORE M. STEVENS, M. D., Portland, Maine

Pyelitis, one of the most common of the more serious complications of pregnancy, is estimated by different authors to occur in from 1.5% to 6% of all pregnancies. It has now become considered as a part of the pregnancy, as are the toxemias, rather than a mere incidental complication such as heart trouble or tuberculosis. We realize now that the disorder is due to certain functional and anatomical changes in the gravid woman.

As the pregnancy progresses there is a dilatation of the ureters to two or three times their normal diameters. This is thought to be due to hormonal influence, causing a relaxation of the musculature. Accompanying the dilatation there is a loss of the normal peristaltic action, which results in urinary stasis, the latter affording a good culture medium for bacterial growth. As the uterus reaches the second trimester of pregnancy pressure is exerted on the ureters at the pelvic brim. The right ureter is more involved than the left and consequently infection is much more frequent on the right side. There is probably no better explanation of this than the dextro-rotation of the enlarging uterus, and the fact that the descending colon is on the left side.

The etiology is otherwise the same as in the non-pregnant cases: the Colon Bacillus preponderating over the Staphylococcus infections. Other organisms may be the causative factor in a minor number of cases.

The seriousness of this complication may be realized from the following facts:

1. It is estimated that 30-40% of these cases fail to go to term.
2. That the fetal mortality is at least twice that usually met, due, in many cases, to prematurity.
3. Eastman of Johns Hopkins states that one-third of these cases continue to harbor the infection long after the delivery.
4. Reinberger and Anderson of Nebraska

published an article in 1937 reviewing 360 cases of pyelitis in 18,000 pregnancies (an incidence of 2%) with five deaths directly attributed to pyelitis. They state: "It is apparent that if five deaths could be found in the records attributable to pyelitis, unquestionably many others occurred. It is apparent that one death occurred in every 45-60 cases of pyelitis complicating pregnancy."

The diagnosis of pyelitis is not difficult—the sudden onset of temperature, chills, costo-vertebral pain and tenderness, nausea and vomiting—and the appearance of albumen and pus in the urine. Bladder symptoms, such as are seen in the non-pregnant cases, are usually lacking in pyelitis of pregnancy, that is the frequent painful and burning micturation.

In obtaining the history of the pregnant patient it is well to note any previous cases of pyelitis as the condition is often not cured between pregnancies.

During the first trimester of pregnancy pyelitis more resembles that of the non-pregnant state and can often be cured by proper treatment. During the second and third trimester, rarely is a pyelitis cured. The patient may be symptomatically free, and the progress of the disease arrested, but cure is not effected until after the pregnancy is terminated.

The medical treatment of pyelitis is interesting because of the introduction in the last few years of several new drugs. In reviewing the literature it is noticeable that each author believes in first trying the alkalinization treatment which is successful in a large percentage of cases. This consists of keeping the patient flat in bed, forcing fluids, bland diet, sedatives as needed, and the use of Sodium Bicarbonate in doses of from 15-30 grains four times daily. The fluid intake should be about 4000 cc. daily. Crabtree prefers Potassium Citrate in doses of 60 to 80 grains per day, rather than Sodium Bicarbonate. The

\* Read before the Portland Medical Club, at Portland, Maine, October 3, 1939.

two salts may be used together in more moderate doses.

To achieve results the pH of the urine should be 7.6. Osmon states that litmus paper should not be used as an indicator and he recommends the following procedure:

2 or 3 drops of a 0.1% solution of bromthymol blue are added to 3 cc. of urine in an ordinary test tube and the resulting color observed. At a pH of 7.6 the color should be a distinct dark blue, but at reactions less alkaline than this a greenish tint will be increasingly more evident. With this treatment the patient may become symptom free and carry on to term satisfactorily.

Methenamine seems to be accepted favorably by some while others doubt its efficacy as a urinary antiseptic. Helmholz, who has had a lot of experience with pyelitis in children, found it to be more effective than any other urinary antiseptic. The adult dose should be 60 grains daily and should be given in combination with Ammonium Chloride to insure proper acidity of the urine. It must be remembered that Methenamine occasionally causes hematuria, and in this event it should be discontinued.

Mandelic Acid acts bactericidally on all gram negative bacilli, and also on *Staphylococcus aureus* and *Streptococcus fecalis*. In using Mandelic Acid the fluid intake should be limited to 1,000-1,200 cc. daily and the urine should be kept at a pH of 5.5 to 5. The average adult dose is 3 grams four times daily, taken after meals and at bedtime. Ammonium Chloride may be used to reach the proper acidity in the urine—in doses of from 30-60 grains per day. Nitrazine paper may be used as an indicator, or a few drops of Methyl red added to urine in a test tube will give a pink color if the acidity is sufficient; if too alkaline the urine remains yellow or orange.

Morson reported seven of ten cases of pyelitis complicating pregnancy where the urine became normal after ten days' treatment. Other workers state that all that can be looked for is abatement of symptoms—seldom is sterility of the urine achieved until after the patient is delivered.

Hexylresorcinol (Caprokol) has not been widely accepted. Leonard, who introduced it,

claimed that the administration of 6.6 grams three times daily resulted in an antiseptic urine in 60% of cases. Other men have not been able to duplicate these results.

Pyridium is excreted in high concentration in the urine but it apparently does not inhibit the growth of the Colon Bacillus.

Acriflavine was introduced by Davis and Beck who used it in combination with Sodium Bicarbonate. There seems to be considerable disagreement as to its usefulness.

Sulfanilamide seems to be a drug used in the treatment of most diseases and many favorable reports are found regarding its use in pyelitis of pregnancy. In 1938, Adam Barr in the Glasgow Medical Journal, reported a series of 64 cases of pyelitis of pregnancy in which this drug was used in treatment. Many of these cases were severe as other methods of treatment had failed to give relief. In the milder cases he used 0.5-0.6 gram doses three times daily. In more severe cases 1.8 grams to 2.4 grams three times daily were used. He writes, "The immediate improvement in the general appearance of the patient and her obvious feeling of well being shortly after the treatment is commenced is in marked contrast to the depression of patient taking large quantities of alkalis. Catheterization of the ureters has been unnecessary in this series of cases even in the grossly toxic cases. Under treatment with alkalis this procedure is commonly necessary. Recurrence of symptoms is exceedingly common in the alkali therapy and readmission to the hospital is frequently necessary. In this series there was no recurrence sufficient to cause symptoms though the urine was not re-examined in all cases. In 10 cases the urine was examined during labor and again in the puerperium, with negative results."

Cook and Buchtel recommend Sulfanilamide in the following dosage:—30 grains the first day, 40 grains the second day, and 60 grains the third day, the dose being decreased to 40 grains on the fourth day. They are divided into four daily doses, and given with 10 grains of Sodium Bicarbonate.

Other authors have reported similar good results with the use of this drug. Kenney reported 16 cases of pyelitis in pregnancy



which she treated with 1.8 grams daily for from 5 to 7 days. In every case, she claims, the symptoms abated in 2 or 3 days and the urine became free from pus, and sterile in an average of 3 days.

None of these authors reported any untoward effect on the fetus. With these favorable reports it would seem as though Sulfanilamide should be given further study in pyelitis in pregnancy. It is well to remember, however, that the drug does produce toxic results in some patients and it should be used only where the haemoglobin and white blood count can be carefully watched.

In those patients with pyelitis who do not show favorable response to medical treatment within a few days, cystoscopy should be done. This requires the services of a competent Urologist. Cystoscopic treatment may consist of cleansing the distended ureter and pelvis by lavage (usually with 1% solution of Nitrate of Silver) or by the employment of the inlying catheter drainage.

Crabtree of Boston, who has had much experience with pyelitis in pregnancy, stated that treatment in his clinic consisted of pelvic drainage only during the period of cystoscopic treatment—that this was adequate, without the need of inlying catheters, if employed early in the disease. Regarding this he writes: "While an improvement in the condition of the patient may be obtained while the catheter is maintained in place, that improvement is apt to be lost on removal of the catheters, because of plugging with pus, or because of bladder discomfort, which is often quite marked when the catheters are kept in place over a period of many days."

Other men state that there is no contraindication to leaving the catheters in place for several days.

Surely any patient who shows signs of severe toxemia or whose blood chemistry shows retention of nitrogenous products, indicating a pyelonephritis, should have the benefit of catheter drainage. In many cases this treatment will overcome obstruction by kinking of the ureter, or pressure at the pelvic brim, or renal stone.

Finally, the treatment "par excellence" is the termination of the pregnancy. This allows prompt drainage from the involved

ureter with spectacular change in the patient's condition. The temperature usually falls abruptly and remains normal.

Eastman states that there are three main indications for interrupting pregnancy:—

1. Failure of the patient to improve after 10 days of intensive treatment.
2. Involvement of renal parenchyma as evidenced by persistent elevation of the blood non-protein nitrogen.
3. Extreme toxicity with lethargy and coma.

With the post-partum involution of the upper urinary tract and the consequent relief of urinary stasis, the infection clears up in about two-thirds of the cases. The remaining third continue to harbor the infection if left untreated. Crabtree has shown that the peak of spontaneous recovery is in the second month following delivery. Thus these cases should be followed closely after delivery and treated until the urine is free from pus and bacteria. In any event the patient should be warned against subsequent pregnancy until at least two years have elapsed.

In cases where termination of the pregnancy is not possible pyelotomy may be considered. It must be borne in mind that destruction of the kidney beyond repair is probable if treatment, either medical or surgical, is not successful, which may ultimately result in nephrectomy.

The following case report is typical of the acute toxic form of pyelitis:

The patient, gravida I, age 33 years, consulted me first on October 31, 1933. She was 6½ months pregnant. Past history was essentially negative. Pregnancy to date had been uneventful. Physical examination revealed nothing abnormal. The urine was negative. Three weeks later she called me to her home, complaining of pain in the right costovertebral angle, fever, nausea, and vomiting. She was kept in bed, fluids were forced, heat was placed to the right kidney region and sedatives and methenamine were ordered. The urine showed a slight trace of albumen and clumps of pus cells. The following day the picture remained the same, except that nausea was more pronounced. On the third day her condition became alarming.

The toxemia appeared overwhelming; she was flushed, apprehensive, dehydrated; the tongue was dry and coated, and there was a marked acetone odor to her breath.

During the night she had had several chills. The temperature was  $102.6^{\circ}$  and the pulse 140. She was tender in both costo-vertebral angles. She was referred to the hospital where infusions of glucose in normal saline were given. In spite of treatment the toxemia became more pronounced and after consultation it was decided to induce premature labor, rather than attempt catheter drainage. The infection was bilateral and the patient's condition was too serious to temporize. This was done and the patient delivered of a living baby weighing 3 lbs. 7 oz. The baby died, however, 12 hours after birth. The mother continued her hectic fever for three days post-partum, the temperature then dropping to normal, where it remained during her stay in the hospital. Upon her discharge the urine showed a slight trace of albumen and a few pus cells. Three months later the urine was free from albumen and pus, although the patient complained of some pain in both costo-vertebral angles.

An acute obstruction of the ureter causing hydronephrosis, even where there has been no previous evidence of renal disease, is quite common during pregnancy. This is due to kinking of the distended ureter or to pressure on the pelvic brim. It is more common during the fifth and sixth months. The patient is seized with a sudden excruciating pain of the renal colic type, so severe that often morphine does not give entire relief. There is tenderness along the course of the ureter and in the costo-vertebral angle. Some of these patients are relieved spontaneously within a day or two and may carry on to term without future trouble. The treatment consists of sedatives or opiates, heat, rest in bed with the patient lying on the opposite side to relieve pressure from the uterus, and urinary antiseptics.

In those cases not so easily relieved, drainage from the affected ureter must be established if the pregnancy is to continue. Here the indwelling catheter gives the most gratifying results. Its use for a few days relieves the obstruction and the patient is freed from the

severe pain and may be carried safely to term or to the time when a viable child may be delivered. However, these patients do acquire a pyelitis which must be treated until the pregnancy is ended.

The following case reports are given to illustrate this type of case:

— I —

Mrs. B. W., a woman of 23 years, gravida II, came to my office August 5, 1937. Her past history was unimportant. Her first pregnancy, three years previously, had been uneventful, except that the delivery was instrumental because of a posterior position of the baby. Her last menstrual period was May 23, 1937, and examination showed her to be about two months pregnant. Her pregnancy progressed normally and the urine was negative at each examination, until October 24th, when she had completed her fifth month of pregnancy. She suddenly developed severe pain in the right side of the abdomen, extending to the costo-vertebral angle. Sedatives, opiates, heat and posture gave temporary relief, but on the following night she again had severe pain that was not relieved by sedatives. She was referred to the hospital, and Dr. Curtis saw the patient in consultation. Cystoscopy showed, quoting Dr. Curtis:

"The bladder was negative except for mass pushing down on the right side and protruding the ureteral orifice, probably pressure from the head of the baby. While the left side of bladder was normal the urine could be seen coming from the left ureter, but none from the right ureter. The catheter was injected, retrograde, with sodium iodide, after removing about 75 cc. of very dark, concentrated urine—residual urine. Scope was removed and a number 8 catheter strapped in."

Urine from the bladder showed 8-10 W. B. C.'s, 10-20 R. B. C.'s, culture was negative. From the Right Kidney 2-4 W. B. C.'s, 1-2 R. B. C.'s, culture negative. Six days later the Right Kidney urine was loaded with W. B. C.'s, 4-6 R. B. C.'s, Culture B. Coli.

The X-ray report of pyelogram by intravenous method was as follows:

"There is about 6 months' enlargement of



the uterus, with the fetal parts just able to be visualized. There is a good injection of the left kidney which shows nothing remarkable other than a slight clubbing of the calyces. On the right side the kidney is markedly dilated, affecting the major and minor calyces, with a redundancy of the ureter about two inches below the junction with the renal pelvis."

Impression of Dr. Thaxter: "Findings are those of hydronephrosis of the right kidney and slightly of the left kidney, probably due to pressure of the pregnant uterus."

The patient was greatly relieved after the drainage from the right kidney was established. She was given several infusions of 5% glucose in normal saline to which was added 31 grains of methenamine. The catheter was removed on the tenth day. It was interesting to note that at no time while she was in the hospital did this patient have an elevation of temperature. She was allowed to go home on the seventeenth day.

The remainder of her pregnancy was uneventful except that she continued to show albumen and pus in the urine throughout. She went into labor spontaneously on February 25th, the date of expectancy being five days later, and delivered a normal male child weighing 8 lbs. 8½ oz.

Three months later the urine was entirely negative and the patient stated that she felt fine. Since then, on occasions she has complained of pain in the right lower quadrant although the urine has remained negative. It is possible that future genito-urinary study might show the cause of this intermittent pain.

## — II —

The second case is that of a Primipara of 32 years, and to be more brief I will report only the findings of interest. The pregnancy progressed normally with normal urine examinations until she had completed the fifth month, when she developed severe pain in the right side which was relieved only temporarily by opiates. She was admitted to the hospital and the cystoscopic report was as follows:

"Under Novacaine anaesthesia cystoscope passed. Catheter was inserted up the right

ureteral orifice. Specimen obtained. Indigo-carmin injected. Dilated right. Normal left. Intravenous diodast injected. Picture taken. Retrograde on the right. Obstruction of the ureter in a five months' pregnancy. No urine could be seen coming from this ureteral orifice before catheter was inserted and we obtained approximately 15-25 cc. which was under pressure when catheter was inserted."

The urine from the bladder showed occasional white cells and occasional red cells. Culture was negative. Urine from the right kidney showed 20-30 R. B. C.'s, and 1-2 W. B. C.'s. Culture was negative.

The X-ray findings were essentially negative: "On the right side the film with the intravenous pyelogram shows a retrograde injection. There is marked reduplication of the pelvis. The major and minor calyces appear to be normal. Impression: Findings are those of normal kidneys, both sides; and a six-month pregnancy."

The catheter was left in place on the right side. On the 6th day the patient had a chill with a temperature elevation of 103°. On the 8th day the catheter was removed and a cystoscopic check-up showed normal kidney function with indigo-carmin dye. The patient was allowed to go home on the 15th day, although she continued to run a low-grade temperature, between 99° and 100°.

This patient was not as fortunate as the one in the previous report, in that she spent the next two months mostly in bed. She had no recurrence of severe pain, but she did run a low-grade toxemia from the pyelitis. She lost weight, developed a marked secondary anemia which was not improved by liver and iron therapy. At times she ran a slight temperature and had difficulty in eating because of nausea.

Because of her condition she was re-admitted to the hospital when seven and one-quarter months pregnant. Before induction of labor she was transfused with 500 cc. blood. She was delivered of a living child, weighing 4 lbs. 10 ozs.

Her improvement following delivery was rapid. She gained weight, the blood came back to normal within two months and she felt well, but the urine still showed albumen and pus. Unfortunately, at about this time,

her husband was transferred to another city and I was unable to follow up properly. I have seen her again only recently, almost one year following delivery, and she still has a few white blood cells in the catheter specimen.

#### REFERENCES

- Eastman, Nicholson J.: Pyelitis in Pregnancy, *West Virginia Medical Journal*, 35:1 (January), 1939.
- Reinberger, James R., and Anderson, Ross E.: Treatment of Pyelitis as a Serious Complication of Pregnancy: Case Report of 5 Deaths, *Nebraska State Medical Journal*, 22:328, September, 1937.
- Crabtree, E. Granville; Prather, George C.; and Prien, Edwin L.: The Management of Pyelitis in Pregnancy, *American Journal of Surgery*, 38:50 (October), 1937.
- Barr, Adam: Para-Aminobenizidine Sulphonamide in the Treatment of Pyelitis of Pregnancy, *Glasgow Medical Journal*, 130:18 (July), 1938.

### *Sulfanilamide in Compound Fracture*

Because of the bactericidal and bacteriostatic properties of sulfanilamide and as vitro studies show these properties to be augmented greatly in concentrations higher than could be safely obtained by systemic administration, Jensen and his associates, after complete debridement of compound fractures or dislocations, place from 5 to 15 Gm. of crystalline sulfanilamide in the wound before closure. These wounds are closed tightly with interrupted sutures of silk to the skin only. Closure without tension on the wound is accomplished when necessary by longitudinal splitting of the skin away from the site of the wound but parallel to the closure. Complete reduction is obtained at the time of debridement and absolute immobilization is accomplished by immediate application of unpadding plaster splints held in place by either circular bandage or plaster. Reduction is maintained, by continuance, when necessary, of skeletal traction in conjunction with plaster splints. Casts are not windowed and the wound is left untouched until such time as consolidation of the fracture allows replace-

ment of splints by circular casts prior to ambulatory treatment. The minimum of 000 plain catgut suture material to accomplish hemostasis is buried in these wounds; no attempt is made to suture any deep structures except nerves. To date, the authors have treated thirty-nine compound fractures and two compound dislocations by this method. In two cases, both tibias, one eight days and the other twelve days after reduction, the fractures were recomposed and subsequently became infected. The other thirty-seven healed by primary intention without local or systemic evidence of wound infection. The authors conclude that the local use of sulfanilamide has opened the way to the more effective treatment of contaminated wounds. The amount to be used in each specific wound depends on the extent of trauma and contamination, but 20 Gm. is the advisable upper limit in any adult patient. From 5 to 15 Gm. has been found sufficient for average to severe wounds. — *Surgery*, St. Louis. 6:1-166 (July), 1939. Abstract: *Journal A. M. A.*, September 9, 1939.

*Early diagnosis of tuberculosis is good economy.* To keep an early case in a sanatorium for a few months may cost a few dollars. To keep an advanced case for several years may cost many thousands of dollars.—*Ohio Public Health*, June, 1939.

*6 years of age* were traced for an average period of five years. Since only 1.6% died it is obvious that young children control infection with tubercle bacilli very well. The first two years are the critical period. The great majority of deaths occurred in homes where there was opportunity for massive and repeated doses.—TORTONE, I., et al., *Amer. Jour. Diseases of Children*, July, 1939.

*629 tuberculin-sensitive children less than*



## *Postoperative Infections Following Abdominal Operations\**

By GEORGE A. TIBBETTS, M. D., Portland, Maine

About twelve years ago while on duty at the hospital there occurred a series of post-operative abdominal wound infections which is always a condition that requires attention and always starts everyone hotfoot for finding out the source of the infection. At this time it was no different and a committee was appointed to investigate everything from cellar to hospital roof. Every check was made and several changes were made in the technique of the handling of the patient, and as usual the scare was over in a short time. Really no definite findings were ever tabulated by the committee. Since then there has been a rise and fall of these outbreaks as there always had been in the past.

The conduct of this investigation especially with reference to blaming everybody all along the line and upsetting the entire morale of doctors, nurses and particularly the operating room made such an impression upon me that I began to make observations on these cases as they arose and I found that post-operative infected wounds of the abdominal wall have quite a story to tell with reference to their rise and fall. Observation has shown that at times there was a rise when the cases were handled by certain individuals. There was an increase at times depending upon outside increase of respiratory conditions. I have also noticed an increase when inexperienced nurses have been allowed to handle the dressing trays and do the dressings.

For the past few years as these cases have occurred in any appreciable number certain tabulations have been made and from these tabulations it appears that over half of these wet wounds are not infected by the pus-producing organisms as it was impossible to obtain any growth when cultured. As we proceed the reason for the above condition will be obvious. A large percentage of the remaining wet wounds showed the organism that one would expect and that is the common organism of the skin, the staphylococcus.

The pneumococcus was found in certain series of cases and these cases seemed to run parallel with the epidemics of the respiratory pneumonia cases. This fact strongly supports my feeling that our infected wounds for the most part are secondary contamination.

A few cases have shown presence of some of the less common bacteria, for instance the gas bacillus but these cases are readily explained as they seem to have a direct bearing upon the type of operation performed.

One of the fascinating facts in this observation which seems contrary to one's expectation was that the colon bacillus was not the common infecting organism. This knowledge has always been a source of satisfaction for it seems to rule out the worry that these wounds are infected by our surgical technique.

Having these facts to work upon let us briefly consider what infection is and at the same time make a slight review of the anatomy of the abdominal wall.

What is infection? It is the invasion of living tissue by bacteria in such a manner as to produce disease either local or general.

Let us also consider the conditions necessary for the infection of the living tissue.

1st. Bacteria must be introduced in greater amount than can be destroyed by the phagocytic action of the tissue.

2nd. Bacteria must be of such virulence that disease will be produced.

3rd. Susceptibility of the host.

In considering the susceptibility of the host we find that the host may have general susceptibility such as the presence of disease, diabetes, syphilis, etc., which make him prone to infection, also there may be local susceptibility, for instance our wound, a subject that will be taken up more fully.

At a time when I was watching some of these cases I chanced to be operating upon one of those badly infected hands and on reviewing my copy of "Kanaval's Surgery of

\* From the Round Table discussion of Post-Operative Complications presented at the 87th Annual Session of the Maine Medical Association, Poland Spring, Maine, June 26, 1939.

the Hand" I was struck with the similarity of the spaces of the abdominal wall. From this time on infection of the abdominal wall had a new meaning.

On analyzing the abdominal wall we find that there are true and potential spaces. The true spaces being between fascia and muscle and superficial to the peritoneum, and the potential spaces being those spaces between structures filled with fat that may resolve under certain conditions such as trauma or hemorrhage.

Therefore we have an abdominal wall structurally suited with pockets and if local susceptibility is present together with the introduction of bacteria of sufficient amount and proper virulence infected wall will result.

Pre-operatively we try to eliminate the possibility of the introduction of bacteria by proper preparation of the skin surface and at the same time attempt by our examination to eliminate those general diseases that make the host susceptible. Our best example being our pre-operative handling of the diabetic patient. As surgeons, local susceptibility must concern us most for it is here that we may do real harm to our patient; by the improper handling of the abdominal wall. All too often the meticulous surgeon will abuse the tissue by too much use of sponge and forceps while on the other hand there are physicians so careless that they do not take proper care of hemostasis which may later result in the formation of either small or large hematomas which in turn may become infected if the right amount and proper type of bacteria are introduced.

At present it is the generally accepted fact that no matter how carefully we prepare our field of operation we do not get an absolutely sterile field but that in the main we do accomplish one of the main necessities for the protection of our patient in that we generally lower the bacteria to the amount where the tissue even if traumatized will take care of it by its phagocytic action.

We are all aware of the pustular areas that occur about our sutures which when cultured may be sterile or show staphylococcus. If sterile they are no doubt due to resolution of

the tissue. Since staphylococcus is present in a great many of these areas it is only fair to assume that the possibility of extension along the suture line into either the potential or true spaces of the abdominal wall is reasonable.

If we are too rough by the use of our sponges or instruments so as to lower the local susceptibility of our host or allow our maneuvers to cause resolution of fat or leave a vessel to gradually form a hematoma in one of these spaces the conditions are right for the formation of an abscess at some level of the abdominal wall.

Since our surgical supply houses have reached such perfection in the preparation of our sutures and since our operating rooms are so carefully personelled for the following out of detail I believe we are able to practically disregard outside contamination from these sources. Even if we accept this fact there should be no let-up in our observation at all times over all things surgical.

So far today in our discussion I must have left the feeling that I am not entirely satisfied that the majority of our staphylococcal wounds come from contamination at the time of operation. We must accept the fact that some do come from skin infections as previously described but there are so many that appear so late that we cannot disregard one source of infection that seems still to exist in spite of many set-ups for protection. At this time I wish to call attention to the question of outside contamination after the wound has been opened for its first dressing.

Many wounds are opened too early. Many wounds must become infected at the time of the first dressing or at some subsequent dressing. It should not be impossible to accept the fact that a wound that looks well on the fifth or sixth day and two or three days later becomes infected should or must have been infected at the time of the operation.

While infection of the abdominal wall usually carries very little danger to our patient and results in only a longer stay in the hospital with its added expense, intra-abdominal post-operative infection has the added picture of calamity.

*Continued on page 28*



## *The President's Page*

We hear reports that the Wagner Health Act, in its present form, is dead, and we hope that the reports are not exaggerated.

If true, it would seem that the revolutionary character and the terrific expense of this New Deal scheme had become apparent to Congress.

But we should not be too sure that the war is won, although we may justly consider that we have been victorious in the battles fought up to date.

A new bill or bills will probably be introduced.

We are informed that the American Medical Association and other interested organizations will be consulted *before* the legislation proposed is framed and introduced — in marked contrast to the procedure followed in presenting the Wagner Act.

It must be remembered that the same appointive Federal officials still head the Departments in Washington.

We wonder if they will have charge of the framing of a new Act, and, if so, whether the sane and sensible principles contained in the Platform of the American Medical Association will have any influence upon them.

We also wonder whether the principal objective of the Wagner Act, the concentration of power in the Federal Departments will, in some form or other, be found in the new Act.

It will also be interesting to observe whether or not the campaign of attacks upon and persecution of organized medicine is continued.

It would seem to be still true that "Eternal Vigilance is the price of Liberty."

GEORGE L. PRATT, M. D.,  
*President, Maine Medical Association.*

## Editorials

### *The National Physicians' Committee*

That the United States stands first among the great nations of the world in the achievement and effectiveness of its medicine, medical practice and unequalled hospital service is beyond rebuttal. No little of this effectiveness is due to the fact that medicine has been free from hampering control, Federal or State, and it cannot be stated too emphatically or too often that the health, welfare and safety of the people of this country depends on the maintenance of this independence. That this control is in danger must be apparent to every thinking physician since the propaganda efforts directed against organized medicine, the purpose of which is to wilfully destroy public confidence in American Medicine and discredit the individual physician, so that there can be foisted on the country as a whole a system of controlled medical practice founded on schemes far different from the fundamental principles which have brought American Medicine to the position that it now occupies.

The American Medical Association is not and cannot properly be other than an association devoted to the advancement of the science and art of medicine. As a scientific organization it has a definite status which properly exempts it from income taxes and coming under certain provisions of the Social Security Act. It may be recalled that the association was recently forced to contest a ruling that it was a business organization which ruling, had it been sustained, would have imposed a financial burden on the treasury of great magnitude. An important fact, therefore, to remember is if the association undertakes real propaganda, no matter how honestly directed against proposals that threaten not only its independence and existence, but most important of all, proposals that threaten to disrupt the type of service and its distribution that are for the best interests and welfare of the people of this country, it is very likely that its status will be changed from an educational institution to something else and that

it will be obliged to pay income taxes and come under provisions of the Security Act.

The objectives of medicine under the control of the profession and those dominated and controlled by and for any political group engages at once in direct conflict. The difference in these objectives must become known to the people of the United States and it is only through and by a non-political and non-profit organization composed of medical practitioners, which can and will coöperate with lay groups and interested institutions, that it can be shown beyond all doubt that the charges of indifference of the profession of medicine to the vexing and worse problems of today are absolutely without fact or foundation. Not only is medicine sympathetic to the ways and means by which these problems be solved or made less onerous but it is anxious to lend all possible aid individually and collectively.

The personnel of the executive board and central committees of the National Physicians' Committee well merits the confidence and financial support of every practitioner of medicine in the United States. First and foremost they are practitioners of medicine, they know well its many problems and anxieties, and no few have been honored with official assignments in National and State organizations. In a recent discussion as to the advisability of this needed group one gentleman announced his willingness to shed his life's blood for organized medicine as represented by the American Medical Association. While such a spirit is most commendable it might be pointed out that cash, rather than transfusions, will be of much more practical value.

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### *Another Bureaucratic Ruling*

Under a somewhat recent edict from the Treasury Department physicians entering the United States from Canada, whether the visit has been one for personal pleasure or business of a professional nature, will find themselves in difficulty with the officers at the port of entry if they have in their possession any



drugs coming under the provisions of the Harrison Act. It makes no difference whether the physician has the right by license to possess and dispense such drugs in his own State of residence. Declaration that one has such drugs, at the port of entry, means their confiscation; if not declared the owner or possessor is liable for the penalties prescribed for the illegal possession of such drugs and bringing them into the United States. That such a ruling is as unfair as it is stupid hardly calls for comment. Physicians in Maine, and

other states bordering on Canada, are not infrequently called across the border and vice versa. That such calls may require the personal administration of morphia is not improbable and it is gratifying to note, so far, Canadian officials have yet to stigmatize physicians as potential criminals or dope smugglers. However, the above ruling is in effect, physicians must guide themselves accordingly, since custom officials have nothing to do but follow orders from Washington.

### *Sulfanilamide in Urinary Infections*

Brandsrup and Sindbjerg-Hansen (*Acta Obstet. et Gynec. Scandinavica*, Stockholm: 19: 113-246 (No. 2), 1939), (1) Report their experiences with chemotherapy in infections of the urinary tract in puerperal women. Observing pyelitis in about 1.5 per cent of the puerperal women and pyuria in approximately 10 per cent up to the spring of 1937 they employed pyelol (a calcium chloride phenyl salicylate preparation) when they began the use of sulfanilamide. 439 cases were treated with pyelol and 120 with sulfanilamide. The patients who were treated with sulfanilamide were given two tablets three times a day for four days. With this dose the urine became free from bacteria in 73 per cent of the cases. In some of the remaining 27 per cent the treatment with

sulfanilamide was continued another four days and in this manner the percentage of recovery was raised to 88. Treatment with pyelol made the urine free from bacteria in 51 per cent of the cases. The authors remark that the superiority of sulfanilamide over pyelol is also brief, inexpensive and convenient. No restriction of diet or water intake is called for but since the literature reports cases, with undesirable secondary effect with the same dosage they employed, they stress the necessity of keeping patients under observation for the duration of the treatment.

Editorial note: The same treatment is recommended in cases of pyuria in non-pregnant women; observing the suggested precautions. —(1). Abstract: *Journal of the A. M. A.*, September 9, 1939, Vol. 113, No. 2.

*George A. Tibbetts—Continued from page 25*

Intra-abdominal post-operative infection may take different forms such as infection of the peritoneum either local or general or abscess formation which may be either solitary or multiple and at times metastatic.

When we are so unfortunate as to get one of these problem cases we seem to be fully aware of our difficulty for we satisfactorily answer the question with the phrase "It prob-

ably would have been the procedure to have drained."

In closing may I express the hope that we will all recognize as early as possible our post-operative wounds and give them adequate surgical treatment not only for our own satisfaction but more for giving our patient a quicker convalescence, less danger to the tissues and a lesser period of suffering.

## *Attention*

### TO MEMBERS OF THE MAINE MEDICAL ASSOCIATION :

The impression seems to prevail among Collection Agencies, and doctors whom some of them fleece regularly and effectively, that the Committee on Investigation of Collection Agencies appointed by the State Medical Association five years ago has ceased to function. Accordingly, solicitors for or representatives of such agencies have become both bolder and more numerous in our State, judging from reports and inquiries received, and sooner or later some of our unsuspecting, careless colleagues are certain to be inveigled into trying to do business with them.

The truth is, your Committee is thoroughly alive and at your service. It stands ready at *any* time to supply *any* physician with a legal report concerning the business method of *any* Collection Agency that may solicit his accounts. Legal opinions are given gratuitously, but, to be of greatest value, they must be sought by the physician **before** the commencement of negotiations with an Agency, not *after*.

Therefore, if ever you contemplate giving (we use the word advisedly) your accounts to an Agency, before doing so, send its name, address and "literachoor" to the Secretary of the State Medical Association in care of the Journal Office in the Maine General Hospital at Portland. As speedily as possible all pertinent information for your guidance will be sent you cheerfully. Don't fail to avail yourself of it.

COMMITTEE ON INVESTIGATION OF  
COLLECTION AGENCIES OF THE  
MAINE MEDICAL ASSOCIATION.



## County News and Notes

### Cumberland

The 152nd meeting and annual election of officers was held December 8, 1939, at the Eastland Hotel. A varied clinical session was given at the Maine General Hospital in the afternoon preceding the meeting of the evening.

The following officers were elected for the ensuing year:

President—Luther A. Brown, M. D., Portland.

Vice-President—Howard Hamblen, M. D., Windham.

Secretary-Treasurer—D. H. Daniels, M. D., Portland.

Councilors—Charles H. Hunt, M. D., Harry S. Emery, M. D., George A. Tibbetts, M. D.

Législative Committee—Charles B. Sylvester, M. D.

Committee on Outside Relations—Roland B. Moore, M. D., Philip H. McCrum, M. D., Richard S. Hawkes, M. D.

Delegates to Maine Medical Association Annual Session—Frank A. Smith, M. D., Ralph Heifetz, M. D., Eugene H. Drake, M. D., Theodore C. Bramhall, M. D., Francis M. Dooley, M. D., Franklin A. Ferguson, M. D., and Edward A. Greco, M. D.

Alternates—Louis L. Hills, M. D., Thor Miller, M. D., Gordon N. Johnson, M. D., Eugene E. O'Donnell, M. D., H. Eugene Macdonald, M. D., William R. Needelman, M. D., and DeForest Weeks, M. D.

Harry Christensen, M. D., was elected to membership and Milton S. Thompson, M. D., was admitted to membership by transfer from the Suffolk County Medical Society of Massachusetts.

Grantley W. Taylor, M. D., of Boston, discussed the problem of carcinoma of the breast in a well-presented paper entitled *The Management of Carcinoma of the Breast*.

Milton S. Thompson, M. D., Orthopedist, of Boston, has located at 31 Deering Street, Portland, in the offices formerly occupied by Dr. Carl C. Corson.

Dr. Thompson, a graduate of Harvard Medical School in 1931, has been in private practice in Boston since 1936, the first two years being associated with Dr. M. N. Smith-Peterson. Dr. Thompson has held the following appointments: Assistant in Orthopedic Surgery at the Massachusetts General Hospital and Harvard Medical School; Assistant Surgical Advisor at Harvard College Hygiene Department and Athletic Association; Orthopedic Consultant at the Free Hospital for Women, Lowell General Hospital, State Prison Colony Hospital, Medfield State Hospital, and the U. S. Marine Hospital at Chelsea. He is a diplomate of the American Board of Orthopedic Surgery and of the National Board of Medical Examiners.

### Portland Medical Club

The annual meeting and banquet was held at the Columbia Hotel, December 5, 1939, at 6.30 P. M. There were 64 members and three guests present. The retiring President, Dr. E. E. O'Donnell, presided.

Dr. Alfred Mitchell, Jr., and Dr. John Allen were made honorary members of the Club. Dr. Kenneth Smith was elected to membership.

The following officers were elected for the ensuing year:

President—Dr. Franklin Ferguson.

1st Vice-President—Dr. Charles Gordon.

2nd Vice-President—Dr. Julius C. Oram.

Secretary-Treasurer—Dr. Alice Whittier.

Board of Censors—Dr. Harold Everett, Dr. Oscar Johnson, Dr. Richard Hawkes.

The orator was Dr. S. J. Beach, who chose for his subject, *Medicine Has Another Bear by the Tail*. He gave an instructive and interesting history of the development of the American Board of Ophthalmology and showed how this work paved the way for the later organization of eleven other boards of specialties.

Respectfully submitted,

Alice A. S. Whittier,  
Secretary.

### Kennebec

The annual meeting of the Kennebec County Medical Association was held at the Augusta State Hospital, Thursday, December 21, 1939.

Clinical Session at 5.00 P. M. Presentation of cases by members of the Staff.

Dinner at 6.30 P. M., which was followed by a business meeting. Minutes of the last meeting were read and approved. The reports of the Secretary and Treasurer for 1939 were read and accepted.

The application for membership of Henry Almond, M. D., of Gardiner, Maine, was received and referred to the Board of Councilors.

The following members were appointed by the Chair to nominate the officers for the ensuing year: Frederick T. Hill, M. D., Waterville; Napoleon Bisson, M. D., Waterville; A. J. Gingras, M. D., Augusta.

They reported as follows:

President—Blynn O. Goodrich, M. D., Waterville.

Vice-President—Roland L. McKay, M. D., Augusta.

Secretary-Treasurer—Frederick R. Carter, M. D., Augusta.

Councilor for three years—C. R. McLaughlin, M. D., Gardiner.

Delegate to Maine Medical Association Annual Session—Leon D. Herring, M. D., Winthrop.

Alternate—Napoleon Bisson, M. D., Waterville.

It was moved and seconded that the by-laws be suspended and the Secretary cast one vote for the officers for the ensuing year which was done.

The speaker of the evening was John H. Talbott, M. D., Assistant Physician, Massachusetts General Hospital, and Associate in Medicine at Harvard Medical School, whose subject was *Water and Salt Metabolism*. He presented a very interesting and instructive paper which was followed by a general discussion.

There were 50 members and guests present.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,  
Secretary.

### New Members

#### Cumberland

Harry Christensen, M. D., Portland, Maine.

Milton S. Thompson, M. D., Portland, Maine.

### Removal Notices

W. H. Kelly, M. D.

From Biddeford, Maine

To Waterboro, Maine.

L. A. Parrella, M. D.

From Lewiston, Maine

To North Haven, Connecticut.

## Necrologies

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### *Charles Melville Bisbee, M. D., 1848-1939*

Doctor Charles Melville Bisbee was born in Canton, Maine, on November 21, 1848, the son of Daniel and Philindia Lombard Bisbee. He was educated in the public schools of Canton, Farmington Normal School and received his M. D. degree from the Medical School of Maine, Bowdoin College, in 1871. He was a veteran of the Civil War. Shortly after he graduated from Bowdoin he started to practice medicine in the town of Peru where, with his first wife, who was Ella R. Tucker, he resided for one year. He then moved to West Sumner, remaining there until the development of Rumford Falls.

Doctor Bisbee represented the highest type of the family doctor. He was an ardent student and even though busily engaged in practice he always found time to keep up with the changes in the medical profession by diligent study. He was an exceptionally good general practitioner. His ability for diagnosing cases was remarkable. He was especially skillful in the treatment of typhoid fever and pneumonia.

He practiced medicine 63 years. He was awarded the honorary fifty-year gold medal by the Maine Medical Association at the termination of his fifty years of practice. He retired from practice about seven years ago.

He was a member of the Oxford County Medical Association, the Maine Medical Association and the American Medical Association. He was on the staff of the Rumford Community Hospital until he retired from practice. He was a Knight Templar, Shriner, member of the Knights of Pythias and of the Odd Fellows.

He is survived by his widow, Mrs. Burt Emma Maddocks Bisbee, and two sons by his first marriage—Chester of Derry, N. H., and Harlan, a professor in the State College at Durham, N. H.

EUGENE M. McCARTY.

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### *John Garfield Potter, M. D., 1879-1939*

Born in Limestone, Maine, the son of George H. and Jane Morgan Potter, Doctor Potter obtained his early education in the grade schools of Monticello, graduated from Ricker Classical Institute in Houlton in 1901, and received his M. D. from Bowdoin Medical School in 1908, where he was a member of Alpha Kappa Kappa medical fraternity. His entire professional life was spent in Houlton, where he was associated for 27 years in practice with the late Doctor F. W. Mann.

Secretary-Treasurer of the Aroostook County Medical Society from 1919 to 1930, he served as its president in 1932-1933. He served as councilor for the sixth district of the Maine Medical Association from May, 1934, to January, 1935, when he was reluctantly forced to resign owing to ill health. For several years he was treasurer of the Aroostook General Hospital and for many years a member and president of the board of trustees of Ricker Classical Institute and Junior College. In December, 1917, he entered the medical corps of the United States Army, went overseas in July, 1918, where he was attached to Base Hospital 53 in Langres until July, 1919. He left the service with grade of captain and continued his interest in the Maine National Guard, with the rank of major, until he retired in 1935.

Obtaining his education by no stint of hard work and great personal sacrifice, Doctor Potter appreciated the problems of the many young people he came in contact with and many a discouraged youngster received most helpful advice and greatly needed material assistance. He will be sincerely missed by his many friends in and out of his profession and especially so in his school and church affiliations.

He is survived by his widow, Evelyn Haskell Potter, whom he married in June, 1910, a daughter, Phyllis, a freshman in Colby College, an adopted son, Richard, and a brother, the Rev. James M. Potter of East Glastonbury, Connecticut.

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## Notices

### *The North Carolina Medical Journal*

Recognizing the need and value of its own State Journal the Medical Society of the State of North Carolina soon will begin the publication of the North Carolina Medical Journal. Wingate M. Johnson, M. D., of Winston-Salem, is Editor, with T. W. M. Long, M. D., of Roanoke Rapids as Secretary and Business Manager. Congratulations to the members of the society on their venture and their official selections.

### *International College of Surgeons*

The United States Chapter of the College will hold its fourth assembly in Venice, Florida, February 11-14. General information regarding the session can be obtained from Dr. Fred H. Albee, Chairman, 57 West 57th Street, New York City.

### *State of Maine*

#### *Board of Registration of Medicine*

Adam P. Leighton, M. D., Secretary

List of Physicians licensed in Maine, November 15, 1939:

Karl V. Anderson, M. D., Central Maine General Hospital, Lewiston, Maine (Tufts, 1939).

Samuel Bachrach, M. D., Memorial Hospital, Worcester, Massachusetts (Tufts, 1938).

Kenneth C. Banting, M. D., Elmira, New York (Univ. Western Ontario, 1932).

Henry A. Brann, M. D., Augusta, Maine (Boston Univ., 1939).

Dexter J. Clough, 2nd, M. D., Eastern Maine General Hospital, Bangor, Maine (Univ. of Penn., 1939).

Paul Elliott Floyd, M. D., Maine General Hospital, Portland, Maine (Harvard, 1939).

Norman M. Jackson, M. D., Central Maine General Hospital, Lewiston, Maine (Albany Medical, 1939).

John Colby Myer, M. D., Providence, Rhode Island (Hahnemann Medical, 1939).

Helen C. Provost, M. D., Augusta, Maine (Boston Univ., 1935).

William D. Reid, M. D., Newton, Massachusetts (Harvard, 1909).

John Eldrid Smith, M. D., Brooklyn Cancer Institute, Brooklyn, New York (Univ. of Vermont, 1937).

Cornelia B. Walker, M. D., Portsmouth, New Hampshire (Columbia Univ., 1934).

Thomas B. Walker, M. D., Portsmouth, New Hampshire (Columbia Univ., 1933).

#### *Through Reciprocity*

Wilfrid J. Comeau, M. D., Massachusetts General Hospital, Boston, Massachusetts (Harvard, 1933).

Bernard Diamond, M. D., Brooklyn, New York (Univ. of Edinburgh, Scotland, 1937).

Henry Bayard Finks, M. D., Portland, Maine (Univ. of Vermont, 1937).

Byron M. Harman, M. D., Essex Co. San., Verona, New Jersey (Univ. of Penn., 1917).

Milton Strong Thompson, M. D., Boston, Massachusetts (Harvard, 1931).

## *Panel Discussions Available*

The following panel discussions are available for County Medical Society programs. Application for these should be made to the Chairman well in advance, if possible, so that arrangements can be made for presentation.

*Pneumonia*, F. T. Hill, M. D., Waterville, Chairman.

*Cardio-Renal Diseases*, E. E. Holt, Jr., M. D., Portland, Chairman.

*Fractures*, Allan Woodcock, M. D., Bangor, Chairman.

*Acute Appendicitis*, F. H. Jackson, M. D., Houlton, Chairman.

*Clinico-Pathological Discussion*, Julius Gottlieb, M. D., Lewiston, Chairman.

*Thoracic Surgery*, George Young, M. D., Skowhegan, Chairman.

*Blood Dyscrasias*, L. H. Smith, M. D., Winterport, Chairman.

*Convulsions*, T. A. Foster, M. D., Portland, Chairman.

*Management of Brain Injuries*, Howard F. Hill, M. D., Waterville, Chairman.

*Your Membership expired December 31, 1939*

## Book Reviews

### *"Modern Medicine in the United States—Past Achievements and Solution of Present Day Problems"*

By S. Adolphus Knopf, M. D., New York.

Dr. Knopf tackled a hard job and has done a good one. It is a sane and sensible presentation of facts regarding the achievements of AMERICAN MEDICINE and he has made a most commendable effort, with success, in marshaling the abundant evidence, which if read and understood by the public at large, would go far in overcoming some of the vicious and unfair propaganda directed against the profession as a whole with the obvious intent to disparage the individual practitioner. He has rendered a signal service to the public and the profession in this monograph. Copies can be obtained from the author: Dr. S. Adolphus Knopf, 16 West 95th St., New York.

### *"Accepted Foods and Their Nutritional Significance"*

This book will be a welcome reference for all who are interested in securing authoritative information about foods. Today the profession is faced with a multiplicity of processed and fabricated foods, all widely advertised, but on which it has little to go except the claims of those interested in their sale and manufacture. Published

under the auspices of the Council on Foods of the American Medical Association the book provides the opinions of that body on many topics of nutrition, dietetics, etc. The book comes in an attractive cloth binding of 512 pages, 5½ x 8½ inches, and can be obtained from the American Medical Association. The price is \$2.00.

### *"Functional Disorders of the Foot—Their Diagnosis and Treatment"*

By Frank D. Dickson, M. D., F. A. C. S. Orthopedic Surgeon, St. Luke's, Kansas City General, and Wheatley Hospitals, Kansas City, Missouri; Providence Hospital, Kansas City, Kansas; and Rex. L. Diveley, A. B., M. D., F. A. C. S. Orthopedic Surgeon, St. Luke's, Kansas City General, Research, and Wheatley Hospitals, Kansas City, Missouri; Providence Hospital, Kansas City, Kansas. 202 Illustrations. Published by J. B. Lippencott Company, Philadelphia, Pa., 1939. Price, \$5.00.

Functional foot disorders, whether they are due to deformities, defective foot balance, improperly fitting shoes, or wearing of foot wear entirely unsuitable for the maintenance of comfort and health, though stylish or in season, bring many persons into the doctor's office. However, many of them leave it again more or less unsatisfied but with the recommendation to see a shoe expert or a foot specialist. Many of the afflictions to which

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\*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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the human foot is subject in infancy, adolescence, adulthood and advanced age can and should be treated by the physician and surgeon. The authors of this volume present a complete textbook dealing with the functional disorders of the foot. Elaborating on Dr. Dudley Morton's famous monograph entitled, "The Human Foot," they enter upon anatomic, physiologic and pathologic descriptions of the foot at various ages with special reference to the causes of and treatment for various forms of foot imbalance. Following these there are several chapters dealing with affections of the toes proper, the nails, the skin, the bones of the foot as well as the constitutional diseases which often affect the foot seriously. In conclusion, there is a chapter on foot strapping and one on foot exercises.

Books on medical subjects with special reference to the foot and its afflictions almost invariably show that "foot troubles" are almost as great a source of human suffering and discomfort as are the various forms of "rheumatism" and it is difficult to understand why the lay specialists should receive so much of this type of clientele year after year. The applications of medical and surgical remedial measures to the human foot belong within the domain of the medical doctor and he is well qualified educationally to serve our foot sufferers and enforce hygienic measures to prevent ailments due to neglect of various sorts.

*"Principles of Chemistry—An Introductory Textbook of Inorganic, Organic, and Physiological Chemistry for Nurses and Students of Home Economics and Applied Chemistry"*

WITH LABORATORY EXPERIMENTS

By Joseph H. Roe, Ph. D., Professor of Biochemistry, School of Medicine, George Washington University; Formerly Instructor in Chemistry, General School of Nursing, Washington, D. C. Fifth Edition. Published by The C. V. Mosby Company, St. Louis, 1939. Price, \$3.00.

To all appearances the preceding editions of this work have been well received. This new, fifth, edition deserves as much. The author has planned to present the fundamental principles and the most important phases of interest to nurses, etc., of inorganic, or organic, and of physiological and clinical chemistry. In addition, he presents a series of laboratory experiments designed to supplement the theoretical part of the various phases of chemistry as outlined in the first and major part of the book. Not only normal or natural chemical processes are described, but whenever possible pathological variations are explained and their meanings interpreted. The chapters on physiological chem-

istry and nutrition render the text applicable to instruction in dietetics, nutrition, etc. The considerable amount of revision and addition of newer material make this a truly up-to-date text. The unusually difficult task of writing plainly and briefly on a large variety of subjects for a variety of students is well performed.

*"The Health Insurance Doctor—His Role in Great Britain, Denmark and France"*

By Barbara N. Armstrong, A. B., J. D., Ph. D.

Published by The Princeton University Press, Princeton, N. J., 1939. Price, \$3.00.

The trials and tribulations, worries and cares of the physicians of such countries as Great Britain, Denmark and France, who are called upon to treat their patients according to public health insurance rules and regulations, are many and varied. Nevertheless, the Danish and British plans, after 50 and 25 years, respectively, of existence seem to be working with sufficient efficiency and remunerative success that the physicians in general seem to enjoy a certain amount of contentment and security from their practice. The French system, having been in existence for only about ten years and based on theories somewhat at variance with the former, does not seem to enjoy the same desired smoothness of operation as is characteristic of the other two. Even though the French system promises greater freedom in the choice of establishing desirable physician-patient relationship theoretically, practically this has not yet been accomplished to anywhere near the same degree of perfection as in the Danish and the English systems.

The author of the book under review has compiled a comprehensive, exhaustive survey of the public health insurance problems as they affect the physician, the patient, and the community in which they live. It is shown how conflicting complexities which threatened the successful execution of these health service systems during the early years of their existence have been greatly simplified by well-reasoned-out improvements by way of administrative re-alignments. However, no matter how far this simplification is carried, the panel system of practice of medicine is never simple, certainly it is not as simple as ordinary private practice, neither is it as complicated as many general practitioners here fear. But simple or complex, the practice of medicine under the various Health Insurance plans seems to provide for more physicians a better average income than does general practice. Whether America will make use of such a system or not, everyone who is desirous of knowing what it means in theory and in practice will find a wealth of reliable information in this book.

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# The Journal of the Maine Medical Association

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Volume Thirty-one

Portland, Maine, February, 1940

No. 2

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## *Multiple Sclerosis (Disseminated Sclerosis)*

AS SEEN IN PRIVATE AND HOSPITAL PRACTICE

By CHARLES W. STEELE, A. B., M. A., M. D., and EVERETT C. HIGGINS, M. D., Lewiston, Maine

At the outset, the authors wish to state that the purpose of this paper is to emphasize the frequency with which cases of multiple sclerosis appear in private and hospital practice and to call attention to some of the more common early signs and symptoms of this disease syndrome. By so doing, it is hoped that the general practitioner may be assisted in making an earlier correct diagnosis when such cases first present themselves to him, as they usually do, for examination and treatment. Multiple sclerosis is one of the most common of the major neurological disorders seen in general practice, and yet it is as frequently unrecognized or misdiagnosed. Despite the fact that the seven cases presented below were far advanced and the majority had seen several doctors previously, the nature of their disorder had apparently been unrecognized when they presented themselves for study.

Since this paper has been prepared primarily for presentation to the busy general practitioner of medicine who is rarely interested in a long review of literature or in a learned debate over the virtues of the numer-

ous theories concerning the etiology of this disease, the authors have purposely included only such essential points about the etiology, pathology, signs and symptoms as seem necessary for a working knowledge of this disease. Therefore, no attempt has been made here to review the voluminous literature on the subject. Any reader who is interested in such a review is referred to an excellent paper by Brain,<sup>1</sup> published in 1929.

The lesions of multiple sclerosis were first pictured by Cruverlhier<sup>2</sup> over one hundred years ago. Charot<sup>3</sup> described the disease more fully in 1863 and emphasized the now famous test book triad of signs—"intention tremor," "nystagmus" and "scanning speech," as pathognomonic of this disorder. Bourneville and Guérard<sup>4</sup> published their important monograph on multiple sclerosis in 1869. Since then the literature, especially in German, has been voluminous; but very little appeared in American publications until the beginning of this century.

The *etiology* of this disease still remains in doubt despite the recent interesting experimental production of areas of demyelina-



tion in the brain and spinal cord of animals by the injection of tetanus toxin (Putnam)<sup>5</sup> and by potassium cyanide (Feiraro)<sup>6</sup>. Brickner,<sup>7</sup> on the other hand, has presented evidence to show that there are lipase enzymes in the blood serum of patients with disseminated sclerosis, which enzymes he believes may be responsible for the production of the areas of demyelination in the brain and cord. Numerous other etiological agents such as lead, toxins of various types, spirochaeta, encephalitis, etc., have been advanced by as many investigators. Some of the earlier theories have been discussed by Brain<sup>1</sup> in his Critical Review, while some of the more recent are presented by Putnam<sup>8</sup> in his paper on Etiological Factors in Multiple Sclerosis.

There is much more definite knowledge about the *pathology* of multiple sclerosis. Ample microscopic evidence exists to show that this disorder is the result of patchy disintegration of the myelin sheaths which cover the nerve fibres in the white matter of the brain and spinal cord, including the optic nerves. The most extensive damage, however, usually falls upon the pyramidal tracts

of the spinal cord and the cerebellar connection.

The principal *clinical manifestations* of multiple sclerosis are accurately predictable from this knowledge of the pathology as; weakness of the upper motor neurone type and incoördination of the voluntary movements. These find expression in the form of nystagmus, slurred speech, intention tremor of the extremities, spastic and ataxic gait, hyperactive tendon reflexes and bilateral Babinski signs (extension plantar responses). The abdominal reflexes are usually lost soon after the onset of the disease. Not uncommonly optic nerve changes appear early in the form of unilateral retrobulbar neuritis with its resultant primary optic atrophy and blindness. Late in the course of the disease there may be interference with bladder control which may give rise either to precipitant or to delayed micturition.

A number of eminent neurologists have tabulated the frequency with which they have found some of these better known signs and symptoms amongst their patients with disseminated sclerosis. The following table lists their findings:

	Birley and Drudgeon <sup>9</sup>	Bohmig <sup>10</sup>	Marquezy <sup>11</sup>	Sachs and Friedman <sup>12</sup>
Lack of emotional control	51.4			17
Scanning or ataxic speech	28.6	16.3	21	36
Diplopia	34.3		34	29
Vertigo	51.4		39	8.25
Paraesthesias	82.6	13.2	75	30
Pallor of optic discs	57.6	33	54	32.6
Nystagmus	74.3	56.2	70	70
Signs of cerebellar defect	42.6		50	
Intention tremor	42.6	41.5	34	55.3
Absent abdominal reflexes	77.1	64.1	68	
Sphincter disturbances	71.4	26	40	40
Ataxic or spastic ataxic gait	51.4		83	43.2
Spastic weakness of lower limbs	45.9	77.6		81.7
Extensor plantor reflexes	91.4		99	78.3
Vibration sensibility (tuning fork)	60.8		32	
Cutaneous sensibility (touch)	31.4			16.3
Postural sensibility	65.7			17

One is immediately impressed by the wide variation in the frequency with which these common signs and symptoms were noted by the authors in the four separate groups of cases they tabulated. This should not be surprising since it is well known that the particular symptoms and signs presented by any given patient with multiple sclerosis will depend entirely upon the number and location of the demyelinated patches in the brain and spinal cord, and on whether or not the patient is having an exacerbation or a remission of his disease when the study is made.

In order that these variations in the clinical picture may be more fully illustrated, the authors wish to present briefly the case histories of seven patients with multiple sclerosis. These records were taken from the authors' private and hospital files.

#### CASE No. 1

*Mr. C. D.* Age 49; married, white, last-maker.

*C. C.:* Unsteadiness, weakness and numbness of the legs.

*P. I.:* The present illness began six years ago with the onset of numbness and tingling sensations in the fingers and toes, which symptoms lasted only a short time. Five years ago this patient slipped and fell, injuring the left large toe. Shortly thereafter, he noticed that he was unsteady on his feet and that his lower legs again felt "numb and dead" from the knees down. The history of this case during the ensuing five years has been that of repeated exacerbations and remissions of these various symptoms. During the interim he has grown slowly but progressively worse, as his legs have become increasingly spastic and weaker and the "dead feeling" and "numbness" has spread slowly upward until the entire leg on each side and the lower trunk have become affected. There has been difficulty with starting the urinary stream and increasing constipation for two years. The patient has noted some dull girdle pain and involuntary twitching of the legs at night. Clonus of the ankles and lower legs has been experienced at intervals for several

months and has been worse whenever there have been exacerbations. More recently there has been emotional instability, irritability and mental deterioration. His diet has always been deficient in meat because he has never liked it. Since the onset of the present illness his appetite has been poor most of the time and he has been deficient in calories as well as in vitamins and meat.

*P. H. System History:* Patient gave no history of double vision, scanning speech, temporary paralysis, sore tongue, diarrhea or primary luetic infection. A right inguinal hernia was repaired in 1904. The patient had what was diagnosed as "rheumatism" in his feet twenty years ago, while he was in the United States Army in the Philippines.

*F. H.:* No one in the family has had a similar illness.

*Physical Examination:* The patient was well developed and fairly well nourished and was in no pain or distress. Temperature was 101°, pulse 88. Optic nerve heads, fundi, mouth, pharynx, heart, lungs, abdomen, genitals and prostate were negative. Extra-ocular motions were normal and visual fields were not grossly narrowed. There was no scanning of speech. Rectal sphincter had normal tone. Extremities showed no edema or evidence of muscle atrophy. The sensations of touch, pain and temperature were not altered.

The patient's gait was spastic (stiff and spasmodic) and ataxic (unsteady). Positive neurological signs included: nystagmus in all directions (rhythmic oscillation of the eyeballs, either horizontal, rotary or vertical) and intention tremor (tremor which occurs when a voluntary movement is made) during exacerbations; absent abdominal reflexes; diminished to absent cremasteric reflexes; hyperactive knee jerks, ankle jerks and patellar jerks; ankle and patellar clonus (rapid contraction and relaxation of the femoral and calf muscles when these groups of muscles are put on sustained tension by downward pressure on the patella or by dorsal flexion of the ankle); positive Rhomberg (swaying of



the body when the subject stands with feet together and eyes closed); positive extensor plantar reflexes (extension instead of normal flexion of the great toe with plantar flexion and fanning of the other toes, as produced by stroking the sole of the foot (Babinsky sign), by stroking the outer dorsal surface of the foot (Chattuck sign), by firm lateral pressure on the calf muscles (Gordon sign), or by firm downward pressure and stroking of the lower leg along the anterior surface of the tibia (Oppenheim sign), by flexion of the terminal phalanx of the thumb when the nail of the index, middle or ring finger is suddenly nipped (Hoffman sign) and tuning fork vibration perception diminished in the hands and wrists and absent in the lower legs.

*Laboratory Data:* Blood haemoglobin 82%, RBC 4,900,000, WBC 7,900, polymorphonuclears 70%, lymphocytes 24%, and mononuclears 6%. Smear showed no stippling of red cells, which were normal in size and shape. Platelets were normal. Kahn was negative. Urine—amber, clear, acid, sp. gr. 1.020, albumin negative, sugar negative, sediment negative. Lumbar puncture—initial pressure 220 mm. of water, pulse oscillations normal, jugular pressure rise and fall prompt and adequate. 10 cc. of clear, colorless fluid removed. Final pressure reading 140, cell count—Wbc 0, Rbc 2, sugar content 80 mg., protein 28 mg., Kahn negative, colloidal gold curve negative.

*Treatment:* Despite the fact that this patient had had his trouble five years and there were many chronic changes in his spinal cord, the authors elected to treat him with intramuscular liver extract. He was given an initial dose of 10 cc. of Lilly's dilute liver extract and this was followed by a 5 cc. dose every second day for six injections. He was then shifted to a 10 cc. dose every five days and this was continued for nine doses. This course of treatment lasted from 8/13/35 to 10/21/35 and 10 cc. of liver was given once a week for another ten weeks and then had to be discontinued because of the

patient's inability to purchase the necessary liver. No vitamin B1 by injection or by mouth was used with this course of liver treatment. In the beginning the patient showed definite improvement, as manifested by better appetite, increase in his general strength, and in his ability to walk. This improvement continued until 10/7/35; but then he had a sudden relapse as characterized by increased spasticity, increased tremor of the extremities, temperature of 101°, nystagmus and double vision. He showed a more prompt recovery than usual after this relapse, but he had another slight set-back 11/1/35. He improved again and did not have another severe relapse until 5/30/37, over a year after liver was discontinued.

*Diagnosis:* Multiple Sclerosis.

#### CASE No. 2

*Mrs. W. S.* Patient was a 53-year-old, married, white, housewife.

*C. C.:* Intermittent crampy pains and stiffness in the legs.

*P. I.:* Five years before entry patient first noted that her legs felt "dead" and "stiff." Following this there was transitory blurring of vision and at one time, double vision. There were periods when she had pains in her back and thighs which radiated down into the front of the legs. First one and then the other leg was weak. The lower legs were swollen intermittently. Once there was thickness of the tongue and difficulty with speech.

In April, 1932, she was studied in a Maine Hospital. Examination then showed nystagmus, ptosis of one eyelid and paralysis of one external rectus muscle. Lumbar puncture was done and spinal fluid findings were negative. A final diagnosis was not made.

In July, 1932, she entered a Massachusetts hospital for study. A basal metabolism was recorded as plus 55% and a subtotal thyroidectomy was done while she was in this institution. Her basal metabolism fell to plus 18 after operation. There was no improvement in the pain or in the swelling of her legs. However, in spite

of negative spine x-rays which included those made after lipiodal injection into the spinal canal, a diagnosis of lumbar arthritis was made. Additional diagnoses of vitamin deficiency and chronic myocarditis appeared on her discharge record.

After she returned from Massachusetts, she continued to have exacerbations and remissions of pain and stiffness in the lower back and upper thighs and the edema of her legs kept recurring. At the time of this study in June, 1936, she had severe pain in the left thigh and lower back, stiffness of both lower legs with flexion deformity of the lower legs on the thighs, and edema of both legs especially below the knees. There was no history of sore tongue or of bladder or anal sphincter difficulty. Her appetite was poor and her diet had been deficient in total calories and especially in vitamins.

*Past History:* At the age of 21 years, this patient had sciatic rheumatism. On the hospital record it states that the patient had the usual childhood diseases, but these were not enumerated. The remainder of the patient's history was negative except for the thyroid operation in 1932, and for the events which were described in the present illness.

*Marital History:* Married 36 years. Two children were living and well. Both were Cæsarean section deliveries.

*Family History:* Negative.

*Physical Examination:* Positive findings included: nystagmus of the right eye on internal rotation, fine tremor of the tongue, which was red and smooth along the borders and tip, absent abdominal reflexes, stiffness and spasticity of the left leg, suggestive left ankle clonus, positive Babinski sign on the left and pitting edema over both lower legs and ankles. The Babinski sign on the right was equivocal. The tuning fork vibration perception was absent over both lower legs and ankles. The gait was slow and difficult because of spasticity of the legs. She had constantly to support and steady herself when she tried to walk. All other findings were negative, including examination of eye grounds, heart, lungs,

and abdomen. Scanning speech and intention tremor were not noted.

*Laboratory Findings:* Basal metabolism was minus 6%. Urine was negative. Kahn test was negative, N.P.N. was 22.2 mg%. Blood calcium determination was 14 mg%. Total serum protein was above 5.2 gms. Lumbar punctures were attempted, but were not successful because of marked lordosis and arthritic changes of the lumbar spine. (Lumbar puncture done in Boston in 1932, was reported as negative).

*Progress:* This patient improved slowly on bed rest, high vitamin diet and physiotherapy treatments. She was discharged in July, 1936, free of pain and able to walk some with help. Subsequently, however, she had a relapse with a recurrence of the pains in the legs and re-entered the hospital in November, 1936.

Physicians who have studied this patient have made various diagnoses. They include: cerebral or spinal muscular atrophy with hyperthyroidism, vitamin deficiency, arthritis and hyperthyroidism, etc.

Our diagnosis of multiple sclerosis was based on the history of exacerbations and remissions of: transitory double vision, blurring of vision, nystagmus, probably scanning speech, and of stiffness of the legs; and on the neurological findings of: nystagmus, absent abdominal reflexes, absent vibration perception in the legs, spasticity of lower extremities, and positive Babinski and Romberg signs.

*Treatment:* This patient was referred in for diagnosis from an outlying district and the authors did not have the privilege of treating this case.

### CASE NO. 3

*Mr C. G.* Patient was a 44-year-old, married, white, steamfitter.

*C. C.:* Weakness of legs and unsteadiness on feet.

*P. I.:* About four years ago, this patient noticed that at times he felt weak. There were periods when sensations of numbness and tingling were felt in the fingers and feet. He had on previous occasions experi-



enced blurring of vision and transitory double vision. Three years ago he lost consciousness in a hay field. When consciousness was regained he noted that his right leg felt "dead and numb" from the hip down. He has had difficulty in walking and handling the right leg since, for when he walked he dragged the right leg and foot. During the past two years both legs have become weak and ataxic and more recently weakness of the hands has also developed. He has been nervous and has been much depressed to the point of attempting suicide. For six months there has been increasing difficulty in starting the urinary stream and the bowels have required larger doses of laxative. The diet was deficient not only in vitamins but in amount and quality. Since the patient became incapacitated for work about three years ago, he and his family have become entirely dependent on the town for food and the town allows them only one dollar a week per person for food. Even previous to this illness the patient ate a diet deficient in vitamins.

*P. H.:* The patient had whooping cough, measles and mumps in childhood. He had pneumonia, and an appendectomy.

*F. H.:* Father died of shock at the age of 68. Mother is 77 and well.

*Physical Examination:* Revealed a tall, thin, middle aged, white male, who was in no distress, but who was depressed about his condition. Temperature was 98°, pulse was 78 and respiration was 20 per minute. Blood pressure was 145/90. Positive findings included: ataxic gait, positive Romberg sign, spasticity of the right leg with toe drop, absent abdominal reflexes, slightly hyperactive knee jerks, ankle jerks, and patellar reflexes, positive Babinski, Gordon, Shattuck and Oppenheim signs on the left, and positive Gordon sign on the right. The tuning fork perception was diminished on the hands and absent on the lower legs and ankles. Anal sphincter tone was diminished. Ataxia and intention tremor were observed on the heel to knee tests. Important negative signs at the time of examination included: normal extra-occu-

lar eye motions, negative optic nerve heads and eye grounds, midline protrusion of the tongue, negative cranial nerves and normal pain, temperature and touch sensations.

*Laboratory Data* included: Urine — clear, alkaline, yellow, specific gravity 1.020, albumin negative, sugar negative, sediment negative. Blood — haemoglobin 75% (Sahli), red blood count 4,880,000, white blood count 6,700, polymorphonuclears 58%, lymphocytes 42%, smear normal. Kahn and Kline Young tests negative. Stool negative.

Lumbar puncture showed initial pressure 115 mm. of water, dynamics normal; 10 cc. of clear colorless fluid removed. Final pressure was 100 mm. of water, cell count 9, sugar normal amount, globulin present, colloidal gold curve 5,443,210,000, Kahn negative.

*Final Diagnosis:* Multiple sclerosis.

*Treatment:* This patient lives in an outlying town and the authors have been unable to supervise his treatment. Furthermore, he has been too poor to buy medicines of any kind and has been unable to buy adequate food.

#### CASE NO. 4

*G. H.* Age 48, single, white, nurse.

*C. C.:* Stiffness and difficulty in using her legs.

*P. I.:* In the spring of 1925, ten years before her death, this patient first began to notice upon occasions in broad daylight, that she would stumble and fall over very small objects. She complained also of intermittent unsteadiness on her feet. Dr. Solomon of Boston, saw her in 1926, and made a diagnosis of multiple sclerosis. In November, 1931, she was admitted to the Central Maine General Hospital with a complaint of numbness of the lower left leg and of toe drop. There was swelling of both lower legs and feet. Thereafter, the course of her disease was characterized by numerous exacerbations and remissions.

In May, 1933, two years before her decease, she entered the hospital for the last time, complaining of stiffness and inabil-

ity to use her left leg. Eventually, spasticity, weakness and ataxia of the legs became very marked to the point where the patient was unable to walk without holding on to objects in the room. During the last year of her illness she developed stiffness, weakness and inability to coordinate the muscles of the hands and arms. She became partially incontinent both for urine and feces. Eventually the legs became markedly edematous from the hips down. There were periods when her speech was slurred. This patient never complained of disturbances of sensation or of vision. Previous to the onset of the present illness and for the first five years thereafter, she lived alone and prepared her own meals, which were deficient in vitamin rich foods and proteins.

*P. H.:* The patient had measles, chickenpox and mumps in childhood. She had scarlet fever at the age of 15 and pertussis at the age of 28 years.

*F. H.:* Irrelevant.

*Physical Examination* revealed a well developed and nourished female in no pain. Positive findings included: a spastic ataxic gait, edema of both legs, absent abdominal reflexes, tremor of the hands on voluntary motion, bilateral positive Babinski signs and ankle clonus. During exacerbations there was nystagmus of the eyes and scanning speech. At times, knee reflexes were hyperactive, while at other times they were diminished or absent. Pain and temperature sensations were normal. Vaginal examination revealed that the patient had an enlarged uterus studded with multiple nodular tumors.

*Laboratory Data:* Urine (first hospital entry) sp. gr. 1.021, albumin SPT, sugar negative, sediment showed numerous pus cells but no red blood cells or casts. Urine (last hospital entry) sp. gr. 1.022, albumin LT, sugar negative, sediment showed numerous pus cells but no red cells or casts. N.P.N. was 30 mg. % Kahn and Kline Young tests were negative. Blood (11/4/31) Hgb. 80%, Rbc 5,050,000, Wbc 6,200 Differential — neu-

trophils 60%, lymphocytes 35%, mononuclears 4%, eosinophils 1%. Blood (5/23/33) Hgb 90%, Rbc 4,280,000, Wbc 9,100, neutrophils 75%, Lymphocytes 15%, mononuclears 6%, eosinophils 3%, basophils 1%.

*Course:* From the onset of the present illness this patient's course was characterized by exacerbations and remissions of her neurological trouble, but this trend was gradually a downhill one. During the last month of her life, she had repeated vaginal and rectal hemorrhages and she died as a result of this complication at the age of 50 years, ten years after the onset of the first symptoms of multiple sclerosis. Permission for post-mortem examination could not be obtained.

*Treatment:* Symptomatic treatment only.

*Final Diagnosis:* Multiple sclerosis. Uterine tumors.

#### CASE No. 5

*W. L.* Patient was a 50-year-old white, married, male.

*C. C.:* Weakness of legs and unsteadiness on feet.

*P. I.:* Six years ago, this patient had sudden loss of vision in the right eye which condition cleared up after a few weeks. Later on he had double vision when he looked to the left. Since the onset of the present illness the patient's wife noticed that he did not speak distinctly and that he ran his words together. Weakness of the left leg, which first was observed after exercise two and one-half years ago, became progressively worse until six months ago, when stiffness of the legs and toe drop manifested themselves. Previous to the present illness, he had an adequate diet except for milk and for vitamin B containing foods.

*P. H.:* Patient had pneumonia at age of 2 years, pertussis at age of 8 years and measles at age of 10 years. A gangrenous appendix was removed in 1913 and he was in bed six weeks with it. System history was negative. He denied gonorrhea and



primary luetic infections. Thirty years ago he had a bad fall striking the back of his head. He was nauseated for two days following this fall and did not feel well.

*F. H. and M. H.:* Negative.

*Physical Examination:* Important positive findings included: lateral slow oscillating nystagmus of the right eye, which did not follow the left eye when the patient looked from left to right, absent abdominal reflexes, hyperactivity of all other reflexes, definite spasticity of the left leg with some diminution in general strength and adiadochocinesis. Babinski, Oppenheim, Gordon, Shattuck and Kernig's signs were negative. Pain and temperature sensations were normal. Pupils were equal and reacted to light. The optic nerve heads and the retinae were normal.

*Laboratory Data:* Urine: specific gravity 1.021, albumin negative, sugar negative, sediment showed rare white blood cells, no casts. Blood: haemoglobin 80%, red blood count 4,690,000, white blood count 10,000, neutrophils 75%, lymphocytes 21%, endothelials 4%. Kahn and Klein Young tests negative. Spinal fluid: cell count 2, globulin 0, sugar normal, colloidal gold curve negative, Kahn test negative.

*Diagnosis:* Multiple Sclerosis. (This patient was seen by Dr. Myerson of Boston, Mass., who concurred in the diagnosis.)

*Treatment:* Five years ago, one of the authors advised this patient to give up his city position and buy a small farm, which advice he followed. Since going to the country he has been outside in the fresh air and sunshine much of the time each day. His diet has consisted of plenty of good food, adequate in all respects, except possibly in vitamin B content.

*Course:* This patient has done the best of all of our patients. It is noteworthy that he is able to be around and to walk and has good muscle strength. He is the only patient who has had a reasonably good diet and adequate fresh air and sunshine.

## CASE NO. 6

*Mr. A. R.* Age 33, married, white, laborer.

*C. C.:* Inability to walk.

*P. I.* About eleven years ago, this patient fell off a fire truck and struck on his back, which resulted in stiffness and lameness for a few days. He remained well for two months before it was noted that he staggered when he walked and that his right leg was weak. Soon all sensation was lost in this leg, but remained normal in the left leg. It became necessary for him to use crutches in order to walk. Five years ago he was put in a cast for fourteen months and has been confined to a wheelchair since. There has been clonus and twitching and extreme stiffness of the legs for four years. Tremor on motion of the arms and hands was observed first about one and a half years ago, but it did not become severe until the past six months. Four years ago there was sudden onset of blindness in the left eye which gradually cleared up. There has been no double vision. Incontinence of urine was first complained of three years ago and has troubled him intermittently since. At intervals there has been slurring and scanning of speech. Emotional instability has been noticeable for a period of one year. Since the patient became incapacitated eleven years ago the family has been in dire economic circumstances; and the diet has been limited in quantity and quality and vitamins and proteins have been deficient.

*P. H.:* Left inguinal hernia was repaired thirteen years ago and a ruptured appendix was operated upon twelve years ago. The patient had typhoid fever in childhood.

*Physical Examination* revealed a fairly well nourished male sitting comfortably in a wheelchair. General physical examination showed the head, heart, lungs and abdomen to be negative. Positive neurological findings were: nystagmus of the eyes, both to the right and to the left, pallor of the outer half of each optic nerve head, intention tremor of the head, neck, and of the

upper and lower extremities, absent abdominal and cremasteric reflexes, incontinence of urine, spasticity of both lower legs with a distinct tendency for the legs to cross each other, marked clonus of the lower extremities, hyperactive tendon reflexes, bilateral positive Babinski sign, absent vibratory sensation in both legs, diminished sensation of touch on the right leg, and slurred speech. The pupils reacted to light. Temperature sensations were normal all over the body and extremities. Sensation of touch was normal except as noted for the right leg.

*Laboratory Data:* Kahn test was negative. Lumbar puncture tests were reported negative. Urine examination was negative.

*Treatment:* Since the authors did not see this patient until he had had the disease eleven years, it was felt that any attempt at specific therapy was hopeless. Quinine Hydrochloride, grains five, three times a day was used for a while in an attempt to control new symptoms; but no noticeable improvements, even in recent symptoms, were noted by the authors.

*Diagnosis:* Multiple Sclerosis — far advanced.

#### CASE No. 7

*Mr. H. N. T.* 43 years old, white, single, sign hanger.

*C. C.* Difficulty in walking and in balancing himself.

*P. I.:* About five years ago the patient first experienced aches and pains in the calf muscles of each leg. There was pain in and weakness of the left knee. Following onset of the present illness the patient has complained most of weakness and stiffness of the legs. There was difficulty in balancing himself and he was dizzy if he tried to look up. He often staggered forward or backward and has fallen down, injuring himself on several occasions. Frequency, urgency, incontinence and difficulty in starting the urinary stream have become disturbing symptoms. He has also developed difficulty in getting his bowels to move. The course of the present

illness has been characterized by exacerbations and remissions of the above symptoms. This patient has had a very poor appetite during the entire present illness. His diet has been deficient in vitamins most of the time, and in total calories part of the time.

*P. H.:* Negative.

*Physical Examination:* Revealed a moderately well nourished male in no pain and whose general physical findings were negative. The gait was slow, spastic, and ataxic and there was difficulty in lifting the feet off the floor and in moving them forward. Positive neurological signs included: nystagmus of the eyes to the left, pallor of the outer half of each optic nerve head, absent abdominal and cremasteric reflexes, hyperactive tendon reflexes, bilaterally positive Babinski, Shattuck, Oppenheim and Gordon signs, slightly positive Romberg sign, marked spasticity and weakness of the lower extremities. The pupils of the eyes were equal, regular and reacted to light. Sensation of touch, pain and temperature were not affected.

*Laboratory Data:* Kahn and Hinton tests were negative. Lumbar puncture done in 1936 was reported to be entirely negative. Urine negative.

*Treatment:* Despite the fact that this patient had had his difficulty five years when he was first seen by the authors and his condition was far advanced, it was elected to try large doses of vitamin B 1 and liver. For the past 15 months this patient has been given liver and vitamin B 1 either intramuscularly or by mouth most of the time. Betaxin 1 c.c. and 2 c.c. of Lilly's concentrated liver extract (2 U.S.P. units per c.c.) were injected intramuscularly once a week, or the patient took large doses of Jeculin (Upjohn) by mouth.

#### DIFFERENTIAL DIAGNOSIS

This disease is confused most often with tabes and central nervous system syphilis. This differential should not prove difficult when it is remembered that the blood and spinal fluid Kahn tests are negative in mul-



multiple sclerosis and positive in 90% of cases with central nervous system syphilis. The tendon reflexes are almost always hyperactive in the former and absent in the latter disease. Occasionally paralysis agitans and certain cases of hysteria may be confused with multiple sclerosis. The tremor in paralysis agitans is not entirely intentional, while that in hysteria is not volitional.

### *Treatment*

As the cause of the disease is still unknown the present treatment is empirical and extremely difficult of evaluation, due to the characteristic spontaneous exacerbations and remissions in the natural course of the disease. Since investigators are apt to give credit to whatever form of therapy they are administering to the patient when a remission occurs, it is not surprising that numerous forms of treatment have been advocated from time to time for this disease.

Nonspecific measures should consist in every effort to improve and maintain the patient's general health and nutrition. Good food, fresh air, and sunshine are helpful. It is agreed that the patient should rest during an exacerbation and until improvement begins, but should be encouraged to live as nearly a normal life as his condition will permit during remissions. Foci of infection, if present, are best removed. Overfatigue is to be avoided.

Inorganic and organic arsenic has long been a part of the older type of routine treatment for multiple sclerosis. Three minims of Fowler's Solution in water is given three times a day for three weeks and omitted for a week out of each month. This treatment is usually continued in the same manner for a period of six to twelve months.

Artificial pyrexia has been recommended by Neymann and Osburne.<sup>13</sup> They reported 44% out of 25 cases were much improved and that 40% received some help. One patient died as result of therapy. In connection with this series of cases it is interesting to note that Sachs<sup>12</sup> has pointed out that 42% of his 141 cases showed remissions without treatment. Brain<sup>14</sup> seemed to feel that artificial pyrexia showed its best results in the rapidly progressing cases seen in young adults. In general it appears fair to say that

the majority of physicians who have had experience in the treatment of this disease are not in favor of using foreign protein therapy or hyperpyrexia, as they feel it may, more often than not, make the patient worse. Until a larger series of cases has been studied this form of treatment should be used with care and discretion.

Brickner<sup>15</sup> has reported that the prolonged administration of quinine hydrochloride grains five, three times daily, has given good results especially in clearing up the more recent symptoms.

The authors wish to recommend that all early cases of multiple sclerosis be treated by a regime of fresh air, sunshine, a vitamin- and protein-rich diet, additional large doses of vitamin B and intramuscular injections of liver extract. Until such time as more is known about the exact cause of the disease, it would seem wiser to use the less concentrated liver extracts and products which contain both vitamin B 1 and B 2.

During their examination of the literature in preparation for the writing of this paper the authors reviewed a publication by Barrelli<sup>16</sup>, who reported good results with liver therapy in the treatment of seven cases of multiple sclerosis. The equivalent of one-half pound of liver, in the form of extract, was given daily.

### DISCUSSION

It is important to point out again that multiple sclerosis is one of the most common neurological diseases encountered in private practice and in the majority of cases it is characterized by exacerbations and remissions over a long period of years. It usually begins in early or middle adult life.

It is the primary purpose of this paper to emphasize some of the more important early signs and symptoms of multiple sclerosis. The earliest symptoms are most often the sudden or gradual onset of weakness and spasticity of the lower extremities, unsteadiness of gait, or unilateral transitory blindness or diplopia. On physical examination one commonly finds absent abdominal reflexes, spastic and ataxic gait, hyperactive tendon reflexes and positive Babinski signs. Nystagmus is often transitory and noted only during exacerbations. Pain and sensory disturbances are rare or mild.

Many cases of multiple sclerosis have been overlooked because textbooks have long stressed that one must have the famous triad of nystagmus, intention tremor, and scanning speech before the diagnosis could reliably be made. When these are present, the diagnosis is made beyond doubt, but this triad rarely appears together until late in the course of the disease. The diagnosis should be suspected or made much earlier when the examiner obtains a history of exacerbations and remis-

sions of spasticity and weakness of the lower extremities, with or without disturbances of the bladder or with transitory blindness or diplopia; and finds on physical examination, absent abdominal reflexes, spastic and ataxic gait, hyperactive tendon reflexes and positive Babinski signs in young or middle-aged adults.

It is recognized, of course, that one should not attempt to arrive at any final conclusion regarding multiple sclerosis from evidence presented from a small series of seven cases. Nevertheless, the authors have been impressed by certain points which seem to stand out in all the case histories here reported. First, every patient had a poor appetite and a diet deficient in vitamin-containing foods and in proteins. Since the histopathological lesions found in the spinal cord of patients with untreated combined system disease (pernicious anemia) and with chronic multiple sclerosis resemble each other closely, it does not seem illogical to consider some deficiency disorder as one of the possible etiological factors in the production of the latter disease. Certain points were noted in our seven case studies which could be construed as confirmatory evidence that multiple sclerosis may be in part, at least, a deficiency disorder. As noted before, all seven cases had poor appetites and ate diets deficient in protein content. Furthermore, patient number five, our only early case, was immediately advised to move to a farm where he could have plenty of fresh air, sunshine and a good diet. It is significant that he has now continued that regime without additional therapy for five years and has not had a single serious relapse. Case number seven has been treated for sixteen months with large doses of Vitamin B and liver extract. He has had no serious relapses during this interval despite the fact that he had had the disease four years before this treatment was started. Treatment with liver extract alone was begun on case number one approximately five years after onset of the disease. Although improvement was noted for about two months, relapses then occurred despite the continuation of the liver therapy.

In view of this consideration and until it is proven that multiple sclerosis is not a deficiency disease it is felt that a regime of treatment with fresh air, sunshine, well balanced diet, large doses of Vitamin B and liver extract warrants further consideration.

Secondly, it is suggested that the toxic and infectious diseases which antedate the onset of the multiple sclerosis in the majority of cases here reported, may have been etiological factors in a manner heretofore undescribed. It is now a well accepted fact that the vitamin requirements are much higher during the course of most infections or toxic diseases. Consequently, any damage to the nervous system which might come as the result of such a vitamin deficiency should appear sooner and be more extensive in patients who have eaten diets low in vitamin content previous to the onset of any such infections or toxic disorders.

It is true, of course, that in some of these cases the toxic or infectious disturbances preceded by months or even years the recognized onset of the multiple sclerosis. However, in view of Putnam's<sup>5</sup> investigation with the injection of tetanus toxin in which he showed that the lesions in the spinal cord did not appear until many months after the injections, and in view of the possibility that the disorder may be present a considerable length of time before recognizable signs and symptoms develop, it does not seem possible to exclude entirely even distant toxic or infectious antecedent disorders from our consideration of possible etiological factors.

## SUMMARY

1. Seven case histories of multiple sclerosis have been presented.
2. Emphasis has been placed on a recognition of the early signs and symptoms of multiple sclerosis.
3. Evidence has been presented in support of a theory that multiple sclerosis may be a deficiency disease, perhaps of vitamin origin.
4. It is suggested that toxic and infectious diseases may help to precipitate the onset of multiple sclerosis by depleting the vitamin content of the subject.

## BIBLIOGRAPHY

1. Brain, W. R.: Critical Review: Disseminated Sclerosis, *Quarterly Journal of Medicine*, 23: 343, April, 1930.
2. Cruveilhier: *Anatomic Pathologique*, published 1835-1842.
3. Charot, J. M.: *Lectures on Diseases of the Nervous System*, Paris, 1868, English translation, New Sydenham Society, Lond., 1877.
4. Bourneville, D. M., and Guerard, L.: *De la Sclerose en Plaques Disseminées*, Paris, A. Delahage, 1869.
5. Putnam, T. J., McKenna, J. B., and Evans, J.: Experimental Multiple Sclerosis in Dogs from Injection of Tetanus Toxin, *Jr. F. Psychol. U., Neurol.* IV: 460-467, 1932.
6. Ferraro, A.: Experimental Toxic Encephalomyelopathy; Diffuse Sclerosis Following Subcutaneous Injections of Potassium Cyanide, *Psychiat. Quart.* VII: 267-283, April, 1933.
7. Brickner, R. M.: Studies on the Pathogenesis of Multiple Sclerosis, *Arch. Neurol. and Psychiat.*, xxiii: 715-726, 1930.
8. Putnam, T. J.: Studies in Multiple Sclerosis VIII. Etiologic Factors in Multiple Sclerosis, *Ann. Int. Med.* 9: 854-863, Jan., 1936.
9. Birley, J. L., and Dudgeon, L. S.: *Brain*, Lond., XLIX: 150, 1921.
10. Bohmig, W.: *Monatschr. F. Psychiat., U. Neurol.*, Berlin, LVIII: 277, 1925.
11. Marquezy, R.: *These de Paris*, 1924.
12. Sachs, B., and Friedman, E. D.: Multiple Sclerosis, General and Special Symptomatology, Association for Research in Nervous and Mental Diseases, 2: 50, 1921.
13. Neyman, C. A., and Osborne, S. L.: The Treatment of Some Multiple Scleroses by Electropyraxia, *J. Nervous and Mental Diseases*, 79: 423-433, April, 1934.
14. Brain, W. R.: Disseminated Sclerosis, *British Medical Journal*, 2: 1006, Nov. 23, 1935, *Brit. M. J.*
15. Brickner, R. M.: Quinine Therapy Over a Five Year Period; Cases, *Arch. Neurol. and Psychiatry*, 33: 1235-1254, June, 1935.
16. Barelli, L.: L'epatrotropia Nella Sclerosi a Placche Diseminate (Reserche su Sette Casi), *Gazz. d. Osp.*, 54: 1468-1477, Nov. 19, 1933.



## *What Shall We Do With the Psychoneurotic? The General Practitioner's Point of View\**

By MAURICE W. PEARSON, M. D., Ware, Massachusetts

What shall we do with the psychoneurotic? It cannot be denied that this is a very real and very common problem, presenting itself to every practicing physician, and yet we too often ignore it or make light of it; we turn and twist and try to dodge it, because it gets in our way and clutters up more or less the whole field of medicine.

I am afraid that someone will ask me, "Well, what is a psychoneurosis anyway?" and I hasten to forestall that question and say that I do not know. The affliction so designated is not an entity, and has never been proved to have any definite pathological basis. I use it here because I think it is the best and most comprehensive term for those morbid conditions which have been variously called neurasthenia, psychasthenia, nervous depression or prostration, hypochondria, melancholia, hysteria, or what have you. There is no definite distinction or line of demarkation between these various conditions. They merge into each other more or less in the same individual, and I believe the attempt to classify them is largely a juggling with words. Psychoneuroses they all are with the emphasis, if you please, upon the psycho or the so-called neuro as the case may be.

Miss D. was a young woman of rather frail physique, twenty-one years old. She was a competent stenographer in a busy lawyer's office, but had been obliged to resign her position on account of ill health some months prior to my first visit to her. Her father was dead and her home was with her mother and older sister. She was in bed because she said she was "too weak to sit up." She had no appetite, and what she did eat caused distress and sometimes vomiting. She was pale and emaciated and could not sleep. She complained of headache, backache, and a variety of other pains and aches.

After careful examination and careful attention to her story, it was evident that she had no organic disease but was a psychoneu-

rotic of pronounced type. For some reason I failed for a considerable time to elicit the information that her former physician had said she had a tumor of the brain.

I will not burden you with the details of her convalescence. It was a long and tedious job—more than a year—to get her on her feet, to convince her that she had no physical disease and was not going to die. She finally recovered, however, secured another position as stenographer and was able to carry on successfully, requiring only occasional reassurance and advice. I lost sight of her and some time later I received a letter from her asking advice and saying that she had left home because her sister had married, that she did not like the husband, in fact hated him and her sister as well, and could no longer live with them, but giving no reasonable excuse. Reading between the lines, and from my acquaintance with her sister and the man she married, it was evident that the trouble was nine-tenths due to her own mean, jealous, neurotic temperament, with probably a considerable sexual coloring in this phase. In short, she is still the self-centered psychoneurotic.

A somewhat similar case is that of Miss F. —24—a college graduate, holding a good position in the line of her college training. I found her in bed after a sleepless night in a state of almost complete collapse; Nervous chills, headache, vomiting, pain in the back, etc. She is a very intelligent, ambitious, sensitive blond, running true to family type. She had been obliged to leave her work in another town and come home, some weeks previously, with some rather vague symptoms, chiefly it seemed because of pain in the left side, which, judging from her description, may have been a pyelitis, though I doubt it. Meanwhile she had been under observation in a hospital for several days, and it was rumored that there was suspicion of tuberculosis of the kidney, but this suspicion

\* Read before the Brookfield Medical Club, April 19, 1939.

was not confirmed. She was sent home from the hospital somewhat improved, but soon relapsed and had been worrying along from bad to worse until she had finally reached the end of her rope and was completely discouraged. She felt sure that there must be some serious disease and, though she did not name it, I think the dread of tuberculosis was still haunting her, and she was very much worried lest she lose her job, being so long absent. Her weight had fallen off from 115 pounds to about 100 pounds; she could not eat nor sleep, and she continued to have some pain and discomfort in the left side in the region of the kidney; headache, digestive disturbance, pains in the legs, etc. Examination revealed no evidence of pyelitis or anything wrong with the kidney or any other organ. She ran no temperature, and it became evident that her symptoms were practically all neurotic in character, that she was headed straight for permanent nervous invalidism unless something could intervene to stop her.

Fortunately she was intelligent enough to grasp the situation in a measure when it was explained to her, though it required several weeks to convince her that she was not a hopeless physical wreck and in fact had no disease. Finally she regained her self-control, her weight and strength improved and she wanted to return to work but was afraid to do so. She wanted to and she didn't want to, and it was hard to convince her that she was entirely able to return and would be much better off and gain faster working than staying at home worrying about it. So she started in and has continued ever since, having only an occasional set-back of a day or two with some of her old symptoms. She is now heavier than she ever was before and in first rate condition, but she'll bear watching because she is the same neurotic, sensitive little blond. At the time of my first visit to her in this illness, she had been under the care of another physician but it is fair to say that I had a clue to the situation because of previous experience with her in one or two similar, but less severe, neurotic attacks.

Mr. M. is a man of 38, an interior decorator by trade and a bachelor of rather timid, eccentric mental type, but a finely developed, strong physique. He was subject to spells

when he had a rapid pulse, felt weak and tremulous with a sense of suffocation and sometimes profuse clammy perspiration. In short, the perfect picture of abject terror. These spells seemed to come on without any definite cause and were occurring so frequently as practically to disable him. Again and again he came to my office or sent for me at his home because he "felt too weak" to walk the short distance.

After careful examination I was able to assure him that there was no evidence of any disease of his heart or any other organ; trying to explain to him that his rapid pulse and all his other symptoms were due to a functional nervous disorder and, after a considerable time, I succeeded in impressing him so that he ceased to have the spells and regained what, for him, was his normal balance. It was not until he had been under my observation for some time that he told me another physician with whom he had been treating had said he had a weak heart and he was not relieved by the treatment which he was getting. He still shows up occasionally with various neurotic ailments from which he is soon relieved and he is the same psychoneurotic but has had no more symptoms referable to his heart and is carrying on successfully.

Mrs. S. is a woman of 40, in good physical condition, who received a slight blow on the chest over the sternum, while at her work in the Boot Shop. She had already been out of work several days on account of this accident when she came to me. I knew her of old and anticipated what I was up against when I saw her coming. There were no marks of any kind indicating a blow but she said she had a constant pain in the chest radiating toward her heart and through her whole body. She felt very weak, had great difficulty in breathing and swallowing; her food seemed to stop in her chest where she was struck and distressed her for a good while after eating, gaseous eructation, etc., etc. She is of rather low-grade intelligence, and nothing would convince her that she was not seriously injured or induce her to go to work again. She insisted that she was not able. She stayed out all last summer and I think has not yet returned to work.



Mrs. G., 44, came complaining of various pains and aches. She had been ailing for many years. She had been troubled with indigestion and one doctor told her she had chronic appendicitis and he removed her appendix. She had a good deal of backache and another doctor said it was due to displacement of the uterus, so he operated on her for that. Then she was troubled a great deal with headache which was caused, so the next doctor said, by a diseased sinus, so he operated on her nose. But she experienced no permanent relief from any of these operations; she still had most of her old symptoms and a crop of new ones beside. I didn't have much luck with her. She soon got away from me and the last I knew she was treating with an osteopath. She is a good example of an all too common type,—the chronic psychoneurotic who, like the woman in the Scripture, "had suffered many things of many physicians."

Then there is the chronic doser who has swallowed enough medicine to float a ship. She never seems to recover fully from any ailment which she happens to have, however slight, and as time goes on she accumulates a choice collection of symptoms which she peddles around among the doctors and takes great pleasure in exhibiting on all possible occasions.

You know her well, and the many devious ways of the great army of psychoneurotics, no two just alike, a few of whom I have tried to describe: Obsessions, phobias and inhibitions, anaesthesias, hyperaesthesias, hysterias, vertigoes, paralyses and all manner of visceral disturbances. No organ or tissue is immune; the head, the eyes, the ears, the teeth, the tongue and throat, the heart, the skin, and the sexual system. Difficulty in swallowing, breathing or talking, fear of consumption, cancer or "shock."

Is it any wonder that we are often puzzled, and at our wit's end to know what to do for these people,—not sorry to pass them over to whoever will take them; and the cultists'll get 'em if yer don't watch out, or even if you do. We in general practice may often escape the tedium by contact with the more tangible problems of our job but the poor psychiatrist, God help him, is condemned to spend *all* his days grabbing his diagnoses out of the air

and trying to piece together the jig-saw puzzles continually dumped upon his doorstep.

A question which is frequently asked by the patient and his anxious friends is: "Doctor, what is the cause of this sickness?" and often it is a question not easy to answer to the satisfaction of the patient and his family, as you well know, partly because in any illness, the causes may be various and complicated, and certainly not less so in the malady under consideration.

Some of the causes *popularly* attributed for so-called nervous break-down are sudden fright, shock or accident, grief, disappointment, business or domestic difficulties, overwork, etc., and it is true that any of these may have a certain causative relation to the break-down, may be the so-called exciting causes, but generally the true cause lies much deeper. For example, I believe it is extremely doubtful if hard work is ever the cause *per se* of a psychoneurosis. The human organism has an immense recuperative power and capacity for work which the individual *enjoys* and in which he is reasonably successful. So long as he can eat and sleep, and get along smoothly with his boss, or his employees,—as the case may be; if he feels that his work is appreciated and no one is riding him; in a word, if he isn't worried *about* his work or about something else, work *per se* won't break him down even if he never takes a vacation. Certain it is that idleness is a much more common cause of nervous break-down than overwork. Work is a blessing and more often a cure than a cause for neurasthenia. Get busy and forget yourself would be a good motto to hang in every neurasthenic's bedroom. Some all-absorbing interest, if one is so fortunate as to have it, be it work or play,—there is nothing better to ward off or cure a neurosis.

I believe that in nine-tenths of those individuals who go to pieces nervously and mentally, the true cause is *temperamental*; in other words, it lies in the minute structure of the brain, determined before birth and absolutely unalterable. This much I concede to those gentlemen of the materialistic school who insist that every chronic functional disease, so-called, has a pathologic anatomical basis, including those of the central nervous

system; but when I say "*minute structure*," I refer to that which is so near to the line where the soul meets the body that no microscope has ever touched it nor ever will. The men of this materialistic school are not interested in the psychical approach and treatment in the psychoneuroses, so they keep their noses on the microscope, and 'tis well; it is true they have some very interesting theories, and talk learnedly of neurons and electrons, but their methods are not fine enough. We can *see* the minute anatomy and pathology of the lungs, the liver, and the kidneys and we know pretty well what goes on in these organs in health and disease; not so the brain. There is nothing in the brain of the intellectual giant to distinguish it from that of the well-developed moron or from that of the man who has been insane the greater part of his life,—no essential difference that we can *see*.

All we know is that certain individuals go to pieces with or without so-called exciting causes and certain others—the majority—do not, no matter what hits them. Of those who go to pieces,—who have this unstable mental structure, we know that a certain proportion can be taught to carry on successfully in spite of it. It is fundamentally an educational problem, not of drugs, or hydrotherapy, or electrotherapy, or massage, and certainly not of surgery; though these it is true may have their place, but to rely upon them exclusively is to neglect the fundamental cause, viz., faulty cerebral function.

No one with experience can doubt that *fear* in its many and varied forms is a large factor in these neuroses, not a cause but an essential part of the picture. The so-called escape neuroses are allied to this element of fear: A man finds himself in an intolerable situation, perhaps related to his domestic, social or business affairs, from which he has an uncontrollable desire to escape. Or he dreads some physical danger or certain responsibilities which have been thrust upon him. For example, a commanding officer in the army, carrying heavy responsibility in time of war but having no conscious fear of the guns, finds that he becomes entirely exhausted on the slightest exertion, begins to have dizzy spells, severe headaches, or what not which finally disable him, and so he

escapes; while the private on the firing line develops so-called shell-shock, suddenly becoming blind or paralyzed, which of course is a form of hysteria. If the patient is a woman, she may take to her bed with a variety of symptoms which become chronic, and so she escapes and gets the sympathy and attention which she had otherwise failed to obtain.

These escape neuroses are by no means deliberate, conscious, intention to deceive; they are generally entirely subconscious and cause real disability leading to chronic invalidism. They are not understood by the laity and not always by the physician: extremely difficult to differentiate and cure, as you well know. The escape neuroses in common with other types, have their basis, I believe, in this same inherited tendency; or if you balk at that term "*inheritance*," call it inherent constitutional tendency, if you please. The fact remains that in a large majority of neurotics the family history, if we can get it all, shows insanity or some form of mental aberration; or we recognize traits in other members of the family, if we know them well, which indicate an unstable mental organism. Even if we discover no such family tendency, I believe it generally is there just the same. The *sum* of the combined inheritance at birth is the thing; it may go back to Adam.

I cannot agree with the teaching of the school of so-called Behaviorists who would have us believe that all conduct and character and indeed the whole individuality is taken on after birth, is determined by training and education; in short, by environmental influences and not by heredity. Nor can I accept the thesis of Dr. Henry C. Link in his recent book, "*The Rediscovery of Man*," which is, that acquired habits, faulty or otherwise, are the sum and substance of personality, though I find no fault with his methods advised for acquiring good habits.

In a former paper I gave you some account of the work of Dr. George Draper of New York, in which I have been much interested. Dr. Draper has conducted at the Presbyterian Hospital what he terms a constitutional clinic, which is merely the intensive scientific study of individuals, and he has arrived at some very interesting conclusions.



He defines personality or "constitution" as he calls it, as "that aggregate of *heredity* which determines (please note that it *determines*) the individual's reaction to environment." This definition hits the nail squarely on the head, I believe; but if it sounds too pessimistic, I am willing to qualify it and say that heredity determines the individual's *natural* reaction to environment, which he may learn to control to some extent, if need be, but can never escape. It is as much a part of his individuality as the color of his eyes, and cannot fail to influence his conduct and his career in no small degree, whether for good or ill.

You are familiar with the various methods which have been in vogue from time to time in management of psychoneuroses: the "rest treatment" of Dr. Weir Mitchell, hypnotism and suggestion as promulgated by the schools of Nancy and Salpêtrière, the training and re-educational methods of Prof. Paul Dubois which are excellent, psychotherapy, as exemplified by the Emmanuel movement, occupational therapy, and in more recent years the method of psychoanalysis as included in the philosophy of Prof. Sigmund Freud.

But the average physician is not much interested anyway in these various treatments of psychoneuroses and as for Freud's theory, he has been inclined to smile when it is referred to, regarding it as a kind of joke, not worthy of serious consideration. But in spite of indifference, ridicule, and active opposition in some quarters, the doctrine has gradually gained ground and is now recognized by the majority of psychiatrists and ridiculed only by the strongly biased or those who do not understand it and will not take the trouble to learn; *that is*, the *fundamental principle* of psychoanalysis is now recognized as having a sound basis.

There is no doubt, however, that Freud had made a much too general application and overemphasis of the sexual factor, important as it is, and this has tended to obscure the fundamental truth in the doctrine, namely that prolonged frustration and repression of the primal instincts and emotions, whether sexual or otherwise, sometimes plays havoc with the nervous system.

Every individual craves some opportunity for self-expression, some outlet for his emo-

tional energy in one way or another; otherwise, this energy may be turned inward, resulting in morbid introspection and serious nervous derangement in certain individuals. The patient generally does not know what is the matter with him, is not conscious that his repressions are in any way responsible for his ailments, and it is the effort of the psychoanalyst to bring to the surface and explain to the patient these hidden causes, teach him to sublimate his emotions and start him on the road to recovery. In practice, the psychoanalytic method has its distinct limitations; it is by no means a panacea but I think it is now pretty generally agreed that it is a useful instrument when properly applied by the psychiatrist whose armamentarium is all too meager at best.

"Well," says someone, "you have rambled about a good deal but you haven't answered the question." Aye, there's the joker in this paper. I had no intention of answering the question,—of trying to tell *you* what to do with the psychoneurotic; but in conclusion I venture to submit a few don'ts for your consideration, with the full confession that I, myself, have violated all of them.

And *first* I would say: Don't operate; and *second*: Don't tell the patient he has a disease or weakness of the heart.

3—Don't tell the patient you suspect a tumor or "growth," unless you insist upon immediate investigation to prove or disprove your suspicion, if possible.

4—Don't tell the patient, *in so many words*, that there is nothing the matter with him; he will never believe you.

5—Don't fail to show a sympathetic—but not too sympathetic—interest in the patient's story.

6—Don't restrict the diet. The majority of neurotics have already been dieted aplenty, and many are half starved but don't know it, being afraid to eat. Feed them.

And finally, on the reverse side of the shield, don't fail to make a careful physical examination, especially in elderly people, before being satisfied with a diagnosis of psychoneurosis; partly because it impresses the patient favorably, and then it *may* be that

you have guessed wrong. Oh, you will probably find something which you *could* operate on, but look out, think it over. If all the psychoneurotics who have been the victims of useless surgery in Massachusetts during the last forty years could be laid in a line, I believe it would extend nearly the whole length of the State.

We should bear constantly in mind that the chronic lesion which we discover, or think we have discovered in the psychoneurotic, is very seldom the cause of the symptoms. Many of us seem slow to learn this fact, especially surgeons; even some very good surgeons—or perhaps I should say good operators—fail in this particular. It is true almost any surgical operation may relieve the patient temporarily; it shifts the mental gears for the time being and is by far the shortest and easiest way out—for the doctor. If we must be operating, we should not expect or promise the patient permanent relief, for generally the last state of that patient is worse than the first.

Don't tell the patient he has heart disease. If you are *sure* he has, name it something else for the time being, until you are better acquainted with him and have a chance to see what medication will do for his heart. I agree that *in practice* it is wiser to play the inheritance theme with the soft pedal.

We must give medicine of some kind, for a time at least, to nearly every psychoneurotic or he is not satisfied; he expects it and it often really helps a great deal to control symptoms and reassure him. The various forms of physiotherapy may also be employed for a time and for the same reason. An office full of shiny machinery makes a favorable impression on the patient but it is a little too easy for us to remember that the machinery costs money and our patients have got to help pay for it.

Unfortunately, the medication and physiotherapy is about as far as the general practitioner can go in the majority of such cases. We have not the time nor the patience for more but we should realize that these things, as a rule, are only incidental and we can try in an occasional case at least, where it seems worth while, to work in at each visit, explanation, encouragement, suggestion, and possibly some psychoanalysis until we get the whole picture and obtain the confidence of the patient. But when we have obtained the confidence of the patient in *our* ability to help him, we have only made a beginning. If we do not succeed in restoring the patient's confidence in *himself*,—in his ability to stand on his own feet and carry on successfully in spite of his troublesome symptoms, that if he will only persevere, the symptoms will become less troublesome, we shall not accomplish permanent benefit for him.

And finally when we find we are getting no response, no prospect of improvement in certain cases, we should make an honest effort to persuade the patient to seek the advice of some reliable psychiatrist who, by his different personality or method, may succeed where we, for want of time, tact, or skill, have failed.

We are living in an age of confusion and change in almost every department of human activity, and the science of medicine is no exception. Among the rapid changes, it is difficult for the medical man to distinguish between the true and the false, between science and pseudo-science. We welcome new methods and new discoveries if they prove useful and well-founded, and amid all the confusion, we may be sure that common sense, common honesty, experience and human understanding will never go out of date in the practice of medicine.

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In 1894 Herman M. Biggs said, "The tubercle bacillus is the sole exciting cause of pulmonary tuberculosis and of every form of tuberculosis, but it must not be assumed that it is the only factor in the causation of this disease. In every infectious disease it is the

relation between two opposing sets of forces which determines the question of susceptibility. On the one hand there is the number and virulence of the germs and on the other, the resistance of the body to these germs."—BIGGS, H. M., *The Forum*, 1894.



## *"Improving the Hospital Through Elevation of Professional Standards"\**

### PANEL DISCUSSION

#### REPRESENTING THE HOSPITAL

#### SUPERINTENDENT

JOELLE C. HIEBERT, M. D., Lewiston

The subject implies what we all know—that there is progress in the diagnosis and treatment of disease. This progress has no value to patients unless it is applied in practice within the hospital. In order to do this, it is necessary that those professional men and women whom it concerns be informed both as to the knowledge of the improvements and also be skilled in the application of the same. Since many improvements involve the expenditure of money, it is obvious that the Governing Bodies, who, as a whole, make purchases possible, be informed as to what these improvements are and what they mean to the patient and the community.

I am aware that the clinician, the surgeon, and the board members, are economically more or less independent of the hospital, but the Superintendent or Director is employed by the Governing Body and his term of office is at the pleasure of the Board. He is, however, the only individual who devotes his entire time to hospital management and he should be acquainted with the values and limitations of present-day procedures and practices and keep his eye and mind open for those things which shall improve the care of the patient. In order to continually bring about improved professional care of the patient, I should like to present the following for your approval:

#### *Governing Body*

Since the governing body appoints the professional staff, I should like to make the following suggestions to the Board, with the full realization that the Superintendent is responsible to them. We will all agree that every Governing Body wants to feel that every patient in the hospital, has the best possible medical and nursing care. For this reason, it seems entirely reasonable that a Superintendent or Medical Director owes it

to the Governing Body to continually inform them what is necessary to bring about better care. Board members get their information from two sources: directly, from the Superintendent of the hospital and by being permitted to sit in with the Executive Committee of Staff; indirectly, the Board gets information from patients who have left the hospital and from visitors to the hospital. I would suggest that, as a rule, it is inadvisable for individual members of the Board to visit the hospital alone with the idea of improving it unless delegated to do so by the Governing Body. The most good will be accomplished if they visit the hospital in company with the Superintendent, and whenever possible the Superintendent should notify the different supervisors and departments of the hospital that a visit is contemplated. By doing this, the visit of the members of the Governing Body will be most effective and really improve the service within the hospital.

By being able to discuss the needs for newer, better equipment with representatives from the attending staff, the Governing Body gets information from those who are going to use it, and money spent for these improvements is spent more intelligently and wisely. The Governing Body can also help to establish post-graduate teaching clinics by appropriating a small sum of money in order to defray the expenses of the visiting clinician. It is possible to bring an outstanding teacher into the community in order to see those patients who present either diagnostic or treatment problems, and a lecture in the evening rounds out the program. Those who attend these clinics and lectures are obviously benefitted. I think the awarding of scholarships to nurses, and where possible, to physicians, for post-graduate study, also brings excellent returns in providing better care for patients. If Governing Bodies base their promotions in the Staff on merit rather than seniority, those whom it concerns are stimulated to grow.

\* Presented at the Annual Meeting of the Maine Hospital Association, Lakewood, August 30, 1939.

### *Physicians*

The professional Medical and Surgical Staff can do a great deal to promote improved care by making use of the educational opportunities that come with the scientific study of the diagnosis and treatment of the patient. After all, most medical literature is a description of the signs, symptoms and progress of disease. A patient having typhoid offers all the opportunities for observation in a small village home as in the larger medical center. I would, therefore, suggest that staff conferences be held frequently in order to discuss new admissions if possible, and certainly all cases presenting diagnostic or treatment problems and all cases where death has occurred. Staffs of all hospitals should make studies of mortality rates, complications, and secondary infections of all patients treated within the hospital so that in each institution one could know what the mortality rate is of appendicitis, gall-bladder disease, childbirth, etc. The same information should be kept of the individual physician or surgeon. It is obvious that no final or sweeping opinion should be hastily formed on this information, but it would be an interesting study if this information were available in order to determine relative standards in the several institutions.

### *Pathologist*

I would further suggest that every hospital have a local pathologist, an anesthetist and a roentgenologist. Hospitals are probably never very much better than their facilities for pathological study. Where a full-time pathologist cannot be employed, one member of the staff should be assigned to this department, under whose direction the laboratory technician should work. In addition to this, the hospital should have a consulting pathologist to whom all tissues removed from patients should be sent. The local pathologist should do the post mortem examinations, and if possible, make the sections from the tumors or tissues removed, and send to the consulting pathologist as much clinical information as possible.

### *Roentgenologist*

The department of roentgenology should be handled very much the same way. One staff member should see all X-rays and make as good an interpretation as he can. By this method, one local resident in each community would become better qualified in X-ray diagnosis. Certainly all doubtful cases should be referred to the consulting roentgenologist. If it can be arranged, the consulting roentgenologist should call at the hospital, inspect the equipment, suggest improvements and interview the patient and attending physician of all cases which he examines. If this method were pursued, every hospital would have a superior diagnosis.

### *Anesthetist*

Wherever there is a hospital having at least three physicians, one of those physicians should be an anesthetist. The local anesthetist should have opportunity for post graduate study, and the board of directors should provide him with that equipment with which he is best acquainted; and in this connection I would suggest that no equipment be purchased except with the recommendation of those people who are going to use it. By having a resident anesthetist, the quality of anesthesia could not always be as diversified and as good as in a larger center, but it will be superior to present methods, and it has in it the opportunity of becoming better continuously.

### *Post Graduate Study*

Staff members who avail themselves of post graduate study in larger medical centers, or through the use of scholarships as provided by the Commonwealth Fund, and the Bingham Associates Fund, bring back from these studies to their several communities, many ideas which, when put into operation not only improve the medical care of their own patients, but of many other patients within the hospital.

### *Certifying Boards*

Every physician desiring to specialize should take his chosen specialty seriously



enough to make every effort necessary to meet the requirements of the Specialty Boards as set up by the American Medical Association. Certification of specialists will help the Governing Body greatly in establishing promotions.

### *Improving Professional Services Through Conferences*

Since a great many procedures must be delegated by the attending physician or surgeon, the actual benefit which the patient derives depends upon the ability of assistants, nurses, technicians and attendants to accurately carry out the instructions. For this reason, it seems to me that periodic conferences of the attending physicians, supervisors, technicians, etc., would greatly facilitate the improved care of the sick. Conferences should also deal with the pre- and post-operative care of patients, infections, sterilization, and demonstration of new apparatus.

#### *Conferences of Nurses*

A great deal of medical progress has been made since the day of the average supervisor's graduation. Unless she has made personal effort to learn or has had opportunity to study, the chances are that she will not be acquainted with many of the procedures expected of her. For this reason, I suggest an organized post-graduate course of instruction in the form of bi-monthly meetings where specialists of the hospital staff and nurses present a program designed to improve the care of the sick. This course should be continuous from year to year. Each hospital can conduct this educational enterprise. It will stimulate everyone who participates in the program, whether as lecturer, demonstrator, or listener and observer.

Men are stimulated to accomplishment by mental intercourse, and joint study of mutual problems. Knowledge which benefits the sick should be available to all. Just as physicians have periodic meetings and nurses hold district conferences, I would suggest that hospital superintendents and representatives of the governing bodies and invited members of the professional staffs also hold periodic regional meetings within the state, in order to discuss joint problems and derive

mutual benefit of advancements made in the several institutions. In the larger cities there are hospital councils and in addition to this there are superintendents' clubs. Those who have attended these meetings are aware of the great benefit that comes from them. It would seem reasonable that if the State were divided into three sections and the superintendents and representatives of the governing bodies got together and elected a chairman and secretary, questions to be discussed might be submitted by the members and meetings could be arranged at a time and place mutually agreeable. By doing so, the advancements made in one hospital would quickly be known in every other institution, thus shortening the period from the time of discovery of new knowledge and its application in the sick room.

If a new apparatus is placed on the market, the relative merits and demerits could quickly be discovered through these conferences without putting each institution through the costly experimental period. In addition to maintaining the high quality of medical and hospital practice, these conferences would offer opportunities for personal acquaintance with colleagues and provide fellowship between people who would otherwise not have opportunity to meet.

By conferences, we are stimulated to accomplishment. Through books and papers, we have revealed to us what other men have thought. I urge the establishment of regional hospital councils so that those who seek new knowledge may find it more easily.

#### REPRESENTING THE SUPERINTENDENT OF NURSES

Alice M. Morse, R. N., Bangor

Nursing care is quickly and constantly evaluated by the patient in our hospitals. Nursing goes on 24 hours a day. It contributes to the immediate comfort of the patient. All this being so, nursing must play a large part in the community conception of the hospital as a whole.

I was asked to develop this paper with the student nurse service in mind. If our hospitals are to give good nursing care through student service what must be our concern?

Our average patient who likes a nurse or the nursing service knows only vaguely what factors contribute to the feeling of confidence he has in the ward environment. It is our business to know what these factors are—

First—We must interest and select the best possible candidate for our schools.

Second—We must give a thorough preliminary or pre-clinical course.

Third—The remainder of the course must be such that it will enable the student to meet the nursing demands of the hospital as she is routed through the departments.

Fourth—In fairness to the individual we must give such a course that the graduate nurse will be able to earn her living in our communities. This fourth point need not be mentioned further, except to say that if schools do not feel this responsibility of giving an adequate preparation good candidates will not be forthcoming. The young girl is looking beyond the three immediate years ahead when she chooses her school.

To go to the first point. In selecting our students we must remember that nurses nurse with their heads, their hands and their hearts—and may I add their feet. A pre-entrance physical examination is important. Nursing makes strenuous physical demands on the young girl. Hospitals find it pays to include chest X-rays and certain laboratory tests in this examination. The preliminary education requires attention. The girl who has chosen all the easy courses in high school should not be considered. I recently heard the head of a commercial school advise girls who considered a business course to take a college entrance course in high school. It is difficult for a superintendent of nurses to judge a candidate by high school grades alone. Psychological tests given before entrance seem necessary. Testing the aptitude of the applicant is being tried out and we hope for results which will eliminate expense and disappointment to the applicant and the school. Three or four months with us tells us much of the candidate which we would like to know earlier. We give room, board and instruction to the misfit which could well be used more advantageously.

The personality of the nurse is most important and we attempt to learn through tests, interviews and references of this illu-

sive something that is so essential. I need only say briefly that good character is a requirement. However, schools which have the entrance requirements outlined here do not seem to attract the light and frivolous, and I should say would have few disciplinary problems related to character weakness.

Our second point—A strong preliminary course prepares the student in some of the fundamentals of the scientific world into which she is so soon to be thrust. We do not work well in a strange environment. The young nurse surrounded by an unintelligible vocabulary is at a disadvantage and will be disinterested and mechanical in her work or if sufficiently intellectually alert she will withdraw to a field which offers the desired stimuli. If not too rushed our young student will attempt to know the "Why" of what she is doing. We can help her on our wards only if she has a preliminary preparation.

Our third point relates to the time the student is contributing a service which in many hospitals constitutes the bulk of the nursing care. At the end of the first 3-6 months our students are giving eight hours a day of bedside care to patients. A weakness in most of our schools and I think of our hospital service is that the 18-year-old girl, with only a few months' preparation, is placed on our hospital wards and expected to perform at that time practically all of the nursing procedures that are performed in our wards. Many times, especially at night, these are done with inadequate supervision by students not emotionally ready for this responsibility nor are they adequately prepared for the skill and judgment required.

I feel strongly that our students should carry less responsibility and receive more supervision in the early months of the course. Such an adjustment can only be made by means of a stable general duty staff and by provision for supervision other than that which the busy head nurses can give. The minute by minute demands upon the head nurse make it impossible for her to give individual attention to the student.

Medical science is making more and more demands upon the nursing staff of a hospital. Physicians, hospital administrators, who listen to complaints, and most often the head nurse become impatient with mistakes or



failures in anticipation or judgment on the part of the student. Can we say how often it should be necessary to repeat a direction? Is two times enough or should our patience hold out for the third or fourth time? If the student's attitude is not what we think it should be at the end of a certain period shall she be considered hopeless? In my own experience I have with some misgiving recommended a nurse for graduation and found after a period of six months to a year of graduate staff duty services that she has developed into a much more dependable and capable nurse. Some of us need more time than others to form our habits of work. Some of us need more individual attention.

I would also like to plead for more time for the young nurse to do her daily assignment. We teach her right methods and then make it practically impossible for her to use them. If the surgeon is pressed for time is he expected to do a slovenly dressing? Not at all. Is he ever confronted with the problem of whether because of the lateness of the hour or the heavy schedule to remove one or two tonsils? No indeed! You may argue that a surgical dressing is more important than care in administering medicines shall we say, or than the persuasion a nurse must use to feed an unwilling patient? Are we going to teach our nurses the details of aseptic nursing and not permit time to carry it out? If short cuts in nursing are to be taken should the young nurse decide what the cuts shall be? Would it not be better for the hospital administrator and nursing supervisors in conference to work out more simple but safe methods if time must be saved?

In closing may I emphasize the benefits to be derived from conferences of all concerned in the care of patients. We will all admit that the patient is not always the first consideration in our hospitals. An illustration—For more than one decade we have been shaking our heads over the awakening of patients at the crack of dawn or before. Could not the combined efforts of our physicians and nurses work out a plan to do away with this early morning activity? Perhaps not but if the hospital superintendent could coördinate the efforts of doctor, nurse, dietitian and housekeeper I think it could be done.

## REPRESENTING THE PRESIDENTS OF BOARDS OF DIRECTORS

GEORGE OTIS SMITH, PH. D., Skowhegan

The unescapable function of the hospital's governing body is supreme authority and full responsibility. It should be within the capability of a lay board to understand the community's needs, but knowledge of the ways and means of meeting the special needs of the sick or injured in the community must be implemented by the highly specialized experience and training available only through professional advice; hence the vital interest of the hospital trustee in this subject of higher professional standards.

There is a lack of satisfactory reception of such professional advice, whether due to defects in the receiving facilities or to static beyond the control of those most desirous of clear reception. To what extent professional standards in their present status are responsible for interference in clear understanding of hospital problems is a topic on which a president of a board may have opinions, admittedly one-sided; hence the value of a panel discussion.

With medical and surgical standards immeasurably higher than even a few decades ago, the vital question arises: is the hospital receiving full benefit of this notable gain in facts and principles?

Comparison of the medical profession with the engineering profession, with which it happens I have had longer and more intimate experience, leads to the following comments: the engineer's procedure has hard and fast limitations; his completed job is branded with a definite rightness or wrongness; if his bridge or dam fails, the full blame rests where it belongs; and by force of circumstances no unwritten code calls for sympathetic, though unwarranted, testimony, from associates.

Service on a members conduct committee in a national engineering society leads to the admission that code enforcement is commonly none too forceful, yet it can be said that never is the effort made to protect or defend a fellow member whose professional conduct had done violence to the truth or the recognized principles of fair dealing with the public. With engineers there seems to be

more of true loyalty to the profession and concern in its advancement than of so called loyalty to deficient fellow members who have hard luck with their work.

Speaking more directly to the topic of higher professional standards that can assist in improving the hospital—the doctors are now recognized by a Federal court as members of a profession rather than belonging to a trade. This recognition increases the obligation to cast off any vestigial remnants of trade spirit, and to enter the hospital door with more of the public service motive. If the hospital management is to serve the public adequately, there must be more self-effacing coöperation from the medical staff.

A higher professional standard is needed in the staff's attitude toward new light upon old problems, and new ways of doing things, expressed in a coöperative effort to advance the hospital technique. Professional standards in contrast with trade practices call for generous coöperation, with the prime purpose of securing larger benefits to the patients.

However, coöperation within the medical staff goes too far when the staff's consensus of opinion as publicly expressed fails to agree with statements from individual members expressed "in confidence." Consistency is a jewel that shines in any profession.

Finally, public hospitals are not built to honor trustees or to support doctors, but to serve unfortunate members of the community who can be helped by improved nursing facilities and coöperative medical skill. Personal ambitions should be parked outside.

#### REPRESENTING THE LAY TRUSTEE

RICHARD D. HALL, Waterville

In this discussion we are interested primarily in what can be done to improve hospital standards by elevation of medical standards as they affect relations with the hospitals. Before we can discuss a thing, it is quite well to define it. In an article that appeared in the April, 1939, edition of the publication of The American Medical Association, Berry C. Smith, General Director of the Commonwealth Fund, defined a hospital in the following manner:

"This then, would be my definition of a hospital, a fireproof, properly equipped plant (whether large or small) with a medical staff

and other personnel competent to render the service made possible by such a plant." My thoughts will be based mainly on this definition and I beg you to constantly remember that they come from a layman whose nearest knowledge about a hospital is that of an interested director and ex-patient.

Let us start at the very apex of the triangle: the medical staff. In any community, be it large or small, there are a certain group of men who have fulfilled the necessary legal requirements to practice medicine. Among these men there are good, bad, and indifferent doctors. This is no more true with doctors than it is with lawyers, bankers, dentists, or other professions or businesses. This leads me to say that one way of improving hospital service is a careful selection of the men who are invited to join the staff. And one step further—a constant checking of the doctors on the staff as to their qualifications to remain there. A hospital should not feel that once a doctor is on their staff that he is qualified to remain for life simply because he was once placed there. Neither should they make the mistake of not keeping an eye on new men in their community or immediate vicinity to keep refreshing and improving their staff. Medical sciences move swiftly today and a young and newly trained man can and may make a valuable contribution to a staff. In modern medicine it may be necessary for a patient to be treated by one or more doctors of the staff over and above his own physician or surgeon. He should feel and know that other staff members are qualified to give him as good attention in their own fields as his own doctor could, should the need arise for such treatment or consultation, during the period of his hospitalization. It is here that a hospital trustee may be of some material aid in coöperation with the medical men already on the staff. True, his medical competence must be passed on by other doctors and not laymen, but laymen who are trustees may well be aware of his ethics and his general desirability for such an appointment. Staff appointments are a most serious piece of business, and they should be regarded as such by staff and trustees alike. Where could there be a more vulnerable point or a better place to improve hospital standards than by constantly elevating the medical staff?



In his definition of a hospital Mr. Smith speaks first of the medical staff and then the other personnel. Under my few remarks concerning other personnel I shall group the superintendent, the nurses, and technicians. There is no question in my mind but what the superintendent can make or break a small hospital. Upon him or her will fall the arduous labor of nearly everything. They should be well trained and should be schooled in their field by courses offered at large institutions in various parts of the country. The smooth functioning of the hospital, the atmosphere, and the feelings of the patient may at times depend entirely on the superintendent.

Now for the nurses employed directly by the hospital. In all cases they should be trained nurses, and as far as possible trained nurses who have done graduate work. The medical staff can do no more than their best and they should have the best nurses that can be provided to carry on when they leave off. There again the nurses employed on the floor represent the hospital and in their contact with the patient they speak much. Nurses should not be hired by the hospital on a hit or miss basis, but they should be seriously considered from such angles as training, experience, personality, and reactions to certain cases. The hospital superintendent or board might well ask themselves this question concerning their nursing services. Is the personnel and service so administered that the planning, supervision, direction and coördination of activities will realize the desired purpose of the organization with a minimum of human effort and friction, with an animated spirit of coöperation, and with proper regard for the genuine well being of all members of the organization? No point in the hospital offers a chance to raise standards so quickly with the exception of the medical staff, as does the improvement in the quality and character of the nurses and their services.

In speaking of the medical staff and the other personnel of the hospital we have two very concrete ways in which we may improve hospital standards by direct elevation of medical standards. I believe there are two other ways such standards may be raised, indirectly to be sure, but worthy of considera-

tion. The first, in this much abused field called public relations, and the second in the type, quality and interest of the directors of the hospital. I shall devote a few words to each.

The brunt of public relations must fall on the superintendent, the nurses, the technicians, and even the orderlies. In most cases, to the patient at least, the doctor can do no wrong, but the other personnel is on the spot. Let us remember that most people's contact with a hospital comes at a time when they, a member of their family, or a close friend, are a patient. They are hardly normal at that time and most of them are scared to death. They need to be treated with the utmost tact and confidence, and their unreasonableness overlooked. This may be unfair, but it is so. It is the kindly word of a nurse, or a short visit from the superintendent that the patient remembers, not the daring and difficult piece of surgery performed by the doctor. Let each employee of the hospital make each patient feel the hospital is revolving about them, and you will have made a definite accomplishment in the field of public relations.

Now let us consider for a moment the hard-working and over-paid individuals who are hospital trustees. If only both adjectives were true! Let the hospital select men for their trustees who are not content to let their duties represent only their attendance at the few yearly meetings. The trustee, if he is worth the name, should visit the hospital often. He should know well the various administrative officers and feel he can exchange opinions with them. He should make suggestions and offer criticisms of a constructive nature. In brief, he should feel that this stewardship is more than an honor or recognition. It is a serious business to which he should and must give serious attention.

In summary, then, let us give serious consideration to our staffs, our personnel, our public relations, and our trustees, all of which present possibilities of raising our hospital standards. Constant attention should be given all of the above groups and phases, and that our one worthy aim in so doing is that we still want to run a hospital, not a laboratory, and that our primary job is that of giving good care to the sick.

## The President's Page

The National Physicians' Committee is discussed in an able editorial in the January JOURNAL.

The personnel of the Committee should and does inspire confidence, and probably the plan is good, but there seems to be some doubt as to whether such a Committee is necessary and as to what it proposes to do.

The Trustees of the New Jersey Medical Society have sent out a letter to all the Presidents and Secretaries of the State Associations criticizing the plan.

I quote from their letter:

"We in New Jersey believe that the part taken by organized medicine should be taken by the A. M. A., not through a specially created subsidiary organization controlled by the A. M. A.

We believe that to take this indirect way will be to invite criticism.

Those who a year ago were threatening the A. M. A. will have handed to them a new avenue for abuse.

They will be able to charge that the A. M. A. is trying to accomplish by subterfuge what it is afraid to do in its own person.

They will be given by the A. M. A. a perfect instrument with which to fill the minds of the public with suspicion and to destroy the good name of the A. M. A. — and the A. M. A. will have no defense.

We are told that this indirect way is necessary in order to avoid the risk of becoming liable to heavy taxation.

We in New Jersey cannot believe that if the A. M. A. offers its advice and coöperation, which have already been sought by those preparing the legislation, it would thereby be classified as promoting legislation.

We also do decidedly believe that no amount of taxes saved can compensate the A. M. A. for the loss of public esteem."

All those on both sides of this question are working for the good of organized medicine — their only difference is which is the better method of procedure.

I am still of open mind but am inclined to the New Jersey point of view.

GEORGE L. PRATT, M. D.,  
*President, Maine Medical Association.*



## Editorial

### *Our Annual Dues*

The JOURNAL again calls attention to the fact that each and every county secretary must file their paid-up membership list with the secretary-treasurer of the Maine Medical Association on or before April first. Prompt attention of the members in meeting this yearly obligation makes possible a 100% list from each county society, since it is through the county societies that membership in the State Association is maintained; it also enables the JOURNAL to publish the complete annual membership roster in the May issue; each county to maintain its full membership standing and for each and all of us help and protection in many ways.

Physicians must recognize in order for medicine to express itself properly today that it is necessary to meet the required costs; they are far from becoming less since demands are increasingly frequent. Unfortunate as it is, and it is partially our fault, a rather one-sided picture has been presented to the public and it will remain one-sided unless medicine itself assumes the task. Aside from our professional work we have a social and public responsibility that must be met. To disregard this fact would reflect on our intelligence; to fail on the job will result in more or less discredit of the profession as a whole. The average physician shuns politics and politicians; quite naturally. As Creighton Barker of New Haven well puts it: "No one is more reluctant than I to advocate that medicine go into public politics but the fact is that public politics have come into medicine, and wisdom points out that we should meet the situation fairly and with the honest strength that is ours."

If the best interests of the profession are to continue, and the health and welfare of the people of this country depend on the fact that medicine must remain the master of its own house, it is time that the rank and file cease an attitude of *laissez-faire* and to recognize that confusing and important conditions do obtain and that we, as a profession, lend

all possible aid in bringing order out of chaos. Changes in the distribution of medical care have taken place; others and more are bound to come, yet it will be only through the efforts and coöperation of every member of the profession that a sane and safe program can be initiated, adopted and made to work.

To assume an attitude that conditions will finally work out all right and with satisfaction to all, with little or no effort on the part of the profession, suggests that one so feeling knows little, if anything, of the ways and means of those who would introduce radical changes in medicine: education, bureaucratic control and the distribution of services. The unconcealed hostility given to the spokesmen for organized medicine at the meeting in Washington under the auspices of the Interdepartmental Committee, obviously held to pave the way for the adoption of measures agreeable to and advocated by it and the Health Bill of Senator Wagner can be, and is, duplicated in many state legislatures. The proponents of any measure sponsored by the medical profession, especially by physicians, can look with confidence to having honest methods impugned; that they will be treated many times with studied discourtesy and by any and all means their purposes wilfully misconstrued.

It would be difficult, if not impossible to find any instance where at the request of any designated authority, Federal or State, an official of the American Medical Association or any of its component state societies refused to lend all possible aid in the solution of problems common to both. It may be just in the day's work for the hired men of any group, cult or ism to employ their detestable smearing tactics but even now, to a certain extent at least, we still operate under a government by and for the people and to the people we must go if their elected representatives and the hired mercenaries persist in exhibiting a truculence apparent as it is unfair.

## County News and Notes

### Androscoggin

The annual meeting of the Androscoggin County Medical Society was held January 18th, at the Y. M. C. A., at Auburn, Maine.

Annual reports of the Secretary and Treasurer were read and approved.

The Nominating Committee comprising Doctors W. L. Haskell, R. W. Goodwin and A. W. Plummer brought in a slate for the coming year.

Officers elected were:

President, John E. Cartland, M. D., Auburn.

Vice-President, Camp C. Thomas, M. D., Lewiston.

Secretary-Treasurer, W. P. Webber, M. D., Lewiston.

Delegate to 1940 annual session of the Maine Medical Association, M. S. F. Greene, M. D., Lewiston.

Alternate, R. N. Randall, M. D., Lewiston.

Councilor, W. J. Fahey, M. D., Lewiston.

A paper entitled *Medicine Today*, which we hope will be seen in an early issue of the JOURNAL, was read by the retiring President, L. P. Gerrish, M. D. It was voted that this paper be sent to THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION for publication.

The scientific program consisted of a very interesting short summary of the drugs and techniques used in anæsthesia, by Doctor Gilbert Clapperton.

A rising vote of thanks was given to the retiring President for his excellent paper, and work of the past year.

Adjourned at 10.30 P. M.

WEDGWOOD P. WEBBER, M. D.,  
Secretary.

### Cumberland

#### Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, January 2, 1940, at 8.15 P. M. The President, Doctor Franklin Ferguson, presided. There were 29 members present.

The paper of the evening was presented by Doctor Donald H. Daniels, who gave an interesting illustrated talk on *Some Interesting Medical Historical Pictures*

ALICE WHITTIER, Secretary.

### Franklin

#### Doctor Bell Honored by Hospital Board

Charles W. Bell, M. D., has been elected consultant surgeon emeritus of the Franklin County Memorial Hospital. He is the first of the institution's staff to receive such recognition.

Members of the staff paid tribute to Doctor Bell in a resolution adopted by the body in which they recounted the physician's service for more than thirty years to the State and Franklin County, particularly his efforts toward modernization of the hospital.

### Knox

A meeting of the Knox County Medical Society was held at the Copper Kettle, Rockland, December 12, 1939. The President, Doctor Apollonio presided. Records of the November meeting were read and approved.

The question of by-laws for the Society was brought up and it was moved by Doctor Jameson that the secretary send to the secretary of the American Medical Assn. for a copy of specimen by-laws as arranged for county societies and advice regarding adoption of same.

The Treasurer's report was accepted and placed on file.

Victor Shields, M. D., of Camden, was elected to membership.

The following officers were elected for the ensuing year:

President, H. L. Apollonio, M. D., Camden.

Vice-President, C. B. Popplestone, M. D., Rockland.

Secretary-Treasurer, A. J. Fuller, M. D., Pemaquid.

Delegates to the 1940 annual session of the Maine Medical Association, G. W. Soule, M. D., Camden, and James Carswell, M. D., Camden.

Alternates, Harry Tounge, Jr., M. D., Camden, and C. B. Popplestone, M. D., Rockland.

Board of Censors, N. A. Fogg, M. D., Rockland, A. W. Foss, M. D., Rockland, C. H. Jameson, M. D., Rockland.

The teaching clinic at the hospital with Doctor Dameshek, Hematologist, visiting was mentioned to the members.

The Fall Clinic was discussed and a talk by Doctor Pratt, President of the Maine Medical Association, with general news of the Society, was the chief feature of the meeting.

Doctor Loughlin reported cases of Multiple Polyneuritis.

Twenty-one doctors were present.

A. J. FULLER, Secretary.



A special meeting of the Knox County Medical Society held at the Copper Kettle, Rockland, January 18, 1940, was called to order by the President, Doctor Apollonio.

Doctor Homans, Professor of Surgery at Harvard, who conducted ward rounds at the Knox County General Hospital, talked on *Thrombosis and Embolism* and gave many new ideas on diagnosis and treatment. Spirited discussion by the members indicated the interest they felt in the talk.

Owing to the fact that this was a special meeting, no business was transacted.

A. J. FULLER, *Secretary*.

## Piscataquis

A meeting of the Piscataquis County Medical Association was held in Doctor Bundy's office at Milo, December 14, 1939.

John B. Curtis, M. D., of Brownville Junction, was elected to membership.

A communication from the Maine Medical Association in which they requested an expression of opinion as to whether the fall clinical sessions were desirable or not was read. It was the unanimous vote of this association that we express ourselves in favor of continuing the fall clinical sessions.

Manning Moulton, M. D., of Bangor, gave a most interesting talk on *Eye Injuries*.

Nine members and one guest were present.

N. H. NICKERSON, *Secretary*.

## York

The annual meeting of the York County Medical Society was held at the Henrietta Goodall Hospital, January 10, 1940. The attendance was the best in several years.

A very enjoyable dinner was served at 1.00 P. M. with the business meeting at 2.00 P. M.

The following officers were elected for the ensuing year:

President, W. T. Roussin, M. D., Biddeford.

Vice-President, O. B. Head, M. D., Sanford.

Secretary-Treasurer, C. W. Kinghorn, M. D., Kittery.

Board of Censors, Paul Hill, Jr., M. D. (1940), Saco; E. C. Cook, M. D. (1941), York Village; J. R. LaRochelle, M. D. (1942), Biddeford.

Delegates to the Annual Meeting of the Maine Medical Association, C. W. Kinghorn, M. D., Kittery; Paul Hill, Jr., M. D., Saco.

Alternates, J. H. Macdonald, M. D., Kennebunk; Carl E. Richards, M. D., Alfred.

Ralph S. Belmont, M. D., of Sanford, and George L. Gould, M. D., of Biddeford, were elected to membership.

Application for transfer for Elmer E. Tower, M. D., of Ogunquit, was read and accepted.

It was voted to request the Council to present E. E. Shapleigh, M. D., of Kittery, with a fifty-year medal.

Our program, *A Panel Discussion of Cardiac Vascular Diseases*, was in charge of E. E. Holt, M. D., of Portland, and proved to be very interesting.

Management of Acute Coronary Thrombosis, John O. Piper, M. D., Waterville.

Clinical Differentiation of Cardiac Arrhythmias, E. H. Drake, M. D., Portland.

The Differential Diagnosis of Heart Pain, C. W. Steele, M. D., Auburn.

Treatment of Cardiac Edema, E. R. Blaisdell, M. D., Portland.

The Retinal Picture in Vascular Disease, E. E. Holt, M. D., Portland.

Our next meeting will be in Biddeford in April.

C. W. KINGHORN, *Secretary*.

## Coming Meetings

### Cumberland

Cumberland County Medical Society, D. H. Daniels, M. D., Portland, Secretary.

There will be a meeting of the Cumberland County Medical Society, February 16, 1940, at the Eastland Hotel, at 7.00 P. M.

Program: A Panel Discussion on Pneumonia, Frederick T. Hill, M. D., Waterville, Chairman.

The evening program will be preceded by a Clinic at the Maine General Hospital at 4.30 P. M.

## New Members

### Androscoggin

Otis B. Tibbetts, M. D., Auburn, Maine.

### Knox

Victor Shields, M. D., Camden, Maine.

### York

Ralph S. Belmont, M. D., Sanford, Maine.

***Have You Paid Your 1940 State and County Dues ?***

## Graduate Medical Education\*

### *A Progress Report of the Field Study on Graduate Medical Education in the United States Being Conducted by the Council on Medical Education and Hospitals*

#### MAINE

##### MAINE MEDICAL ASSOCIATION

The Committee on Graduate Education of the Maine Medical Association through its chairman, Dr. Frederick T. Hill, has expressed the opinion that it has been generally accepted, over the past two years, that the medical profession must assume the responsibility for a continuation program of professional education.<sup>1</sup> Heretofore any effort of this kind has been left largely to the initiative of the individual physician. In the past it has been assumed that the responsibility for medical education has rested largely with the medical school. It is now realized that the school's responsibility may cease at the time of graduation and yet the physician's education must be continued through the years, for medicine is not static. Medical organizations can assume this responsibility and must, especially where the initiative of the individual is lacking.

During the past seven years the Maine Medical Association has changed the character of its two annual meetings and has consistently improved its programs, elevating the educational standard. Those physicians who attend the annual summer meetings may benefit from the two mornings devoted to group conferences. These meetings are held in a resort hotel, away from the cities. At the fall clinical sessions, two full days are given to clinical demonstrations, group clinical conferences, case reports and round table discussions. These meetings are held in one of the four cities of the state where hospital facilities are available for clinical instruction. Local physicians conduct day clinics and ward rounds, utilizing the facilities of coöperating local hospitals. Daytime sessions are held from 9.30 a. m. to 5 p. m., followed by dinner, with the first evening devoted to a panel discussion of a subject of current interest. For example, anesthesia was discussed by four out-of-state and two Maine physicians in October, 1939. The second evening a guest speaker discussed another subject as part of the regular program of the local county medical society.

Attendance at the annual summer meetings of the state association has varied from 318 to 466 and at the fall clinical conferences from 216 to 249. There are 987 physicians in Maine, 718 of whom are members of the state medical association.

Two years ago the committee on graduate education developed a program modeled on the panel system in which usually six or more Maine physicians were assigned to certain phases of the subject under discussion. Each was limited to fifteen minutes and during this time other members of the panel could interrupt with questions or objections, thus permitting a more or less continuous debate. Also questions from other physicians were discussed. An effort was made to cover the topic selected in approximately two hours. Panel discussions available for county medical society programs included pneumonia, cardiorenal disease,

fractures, acute appendicitis, laboratory procedures, thoracic surgery, blood dyscrasias and convulsions. A chairman was appointed for each topic selected. In the last two years practically all the fifteen county societies in the state have invited the committee on graduate education to give panel discussions. No fees are charged; the state association in 1938 appropriated \$500 to pay the travel expenses of panel participants.

##### GRADUATE FELLOWSHIPS

Practicing physicians of Maine are afforded the unique opportunity of having their graduate study financed in other states where ample facilities for clinical instruction have been more fully developed. The graduate committee of the state association has coöperated with the Bingham Associates Fund and the Commonwealth Fund, of New York, in an endeavor to allocate available fellowships where most needed.

Applicants for Commonwealth Fund grants must be under 45 years of age, graduates of approved medical schools, in good standing with the Maine Medical Association and in practice for five or more years in communities of less than 10,000 population. Fellowships are provided in Boston hospitals for one month in medicine, pediatrics, obstetrics or office surgery. The stipend is \$250 plus tuition and travel expenses.

Bingham Associates Fund fellowships are available to members of the Maine Medical Association, each carrying an honorarium of \$250. The New England Medical Center, Tufts College Medical School, Boston, provides rooms and meals for fellows at reduced rates. One week fellowships, sufficient to pay expenses only, are offered also. Subjects included are obstetrics and gynecology and pediatrics, one month each; allergy, hematology and proctology, forty hours each, and diabetes, endocrinology, electrocardiography, cardiology, genito-urinary diseases, diseases of the chest, gastro-enterology and dermatology. Classes are limited to from four to six physicians.

Approximately 15 per cent of the physicians practicing in Maine have taken fellowships offered by either the Bingham Associates Fund or the Commonwealth Fund and an additional 10 per cent have independently engaged in similar study.

##### RECOMMENDATIONS FOR CONTINUATION STUDY

In May, 1939, the state medical association's committee on graduate education recommended (1) that greater coördination be developed between the annual summer meeting and the annual fall clinical session to insure a long-range point of view, (2) that panel discussions in county societies be continued, (3) that hospital staff programs, utilizing clinical material for case studies, be encouraged, (4) that the state association participate in the New England Post-Graduate Assembly, held in Boston, and (5) that fellowships offered by the Bingham Associates and the Commonwealth funds be more generally utilized.

\* Reprinted from *The Journal of the American Medical Association*, Vol. 114, No. 3, Page 260.

<sup>1</sup> Hill, F. T.: The Place of the Panel Discussion in a Program of Graduate Education, editorial, *J. Maine M. A.* 30: 60 (March) 1939.



## INSTRUCTION IN OBSTETRICS AND PEDIATRICS

An extension course in obstetrics and pediatrics was given in 1936-1938 under the auspices of the Maine State Department of Health and Welfare, in coöperation with the Maine Medical Association. An obstetrician and a pediatrician from Maine were engaged for the lectures, which were given in the six councilor districts of the state. Afternoon and evening sessions were illustrated with movies. Obstetric subjects included normal labor, forceps procedures, breech presentations and, in pediatrics, asphyxia, vomiting and injuries of the newborn. Three or six lectures were given in each locality. Attendance during 1936-1937 was 216 in obstetrics and 160 in pediatrics. In 1937-1938 the attendance totaled approximately 130 physicians. No registration fees were charged, since federal funds were utilized.

## LENDING LIBRARY FACILITIES

The Frederic Henry Gerrish Memorial Library, Lewiston, Maine, established in December, 1936, with a grant from the Bingham Associates Fund at the Central Maine General Hospital, serves the medical profession of the state with recent periodicals and other reference material. There are 124 foreign and domestic periodicals received by the library. In addition, there is a large collection of selected reprints. Approximately 400 journals are requested each month. Items may be borrowed for a period of two weeks by members of the Maine Medical Association. A rotating library service through six associated hospitals was begun a year ago. Six current journals are mailed to each hospital each month and remailed by each hospital until the circuit is completed. A part time librarian is employed. The cost of this library service approximates \$1,000 annually.

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## Notices

### *Bureau of Health Services for Crippled Children Clinic Schedule*

<b>Bangor:</b>	<i>Eastern Maine General Hospital</i> Thursday, 1.00-3.00 P. M. March 7th
<b>Rockland:</b>	<i>Knox County Hospital</i> Thursday, 1.30-3.00 P. M. February 29th
<b>Waterville:</b>	<i>Thayer Hospital</i> Thursday, 1.30-3.00 P. M. March 21st
<b>Portland:</b>	<i>Children's Hospital</i> Monday, 9.00-11.00 A. M. February 12th, March 11th
<b>Lewiston:</b>	<i>Central Maine General Hospital</i> Saturday, 9.00-11.00 A. M. February 24th, March 30th
<b>Rumford:</b>	<i>Rumford Community Hospital</i> Wednesday, 1.30-3.00 P. M. March 27th
<b>Machias:</b>	<i>Normal School</i> Wednesday, 1.00-3.00 P. M. April 17th

N. B.: This clinic schedule is subject to change. If changes are necessary adequate notice will be given.

### *Tumor Clinics*

<b>Bangor:</b>	<i>Eastern Maine General Hospital</i> Thursday, 11.00 A. M.-12.00 M. Director, <i>Magnus F. Ridlon, M. D.</i>
<b>Lewiston:</b>	<i>Central Maine General Hospital</i> Tuesday, 10.00 A. M.-12.00 M. Director, <i>E. V. Call, M. D.</i> <i>St. Mary's General Hospital</i> Wednesday, 4.00 P. M. Director, <i>R. A. Beliveau, M. D.</i>
<b>Portland:</b>	<i>Maine General Hospital</i> Thursday, 11.00 A. M.-12.00 M. Director, <i>Mortimer Warren, M. D.</i>
<b>Waterville:</b>	<i>Sisters Hospital</i> 1st & 3rd Thursdays, 10.00 A. M. Director, <i>B. O. Goodrich, M. D.</i> <i>Thayer Hospital</i> 2nd & 4th Thursdays, 10.00 A. M. Director, <i>E. H. Risley, M. D.</i>

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### *Venereal Disease Clinics*

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Millinocket, Old Town, Portland, Presque Isle, Rockland, Rumford, Sanford, Waterville, Wilton, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on request to the Director, State Bureau of Health, Augusta, Maine.

Maine Chapter of the American Physiotherapy Association

There will be a meeting of the Maine Chapter of the American Physiotherapy Association at the Eastern Maine General Hospital, Bangor, Maine, February 17, 1940. The speaker will be Allan Woodcock, M. D., Bangor.

Officers of the Association:

President, Mary P. Clancey, Maine General Hospital, Portland.

Vice-President, Florence Trask, Children's Hospital, Portland.

Secretary-Treasurer, Ruth S. O'Brien, Office of Milton S. Thompson, M. D., Portland.

Chairman of Program Committee, Florence Orr, Eastern Maine General Hospital, Bangor.

Chairman of Publicity, Eleanor S. Barnard, Veterans Hospital, Togus.

American Board of Obstetrics and Gynecology Examinations

The general oral and pathological examinations (Part II) for all candidates (Groups A and B) will be conducted by the entire Board, meeting in Atlantic City, N. J., on June 8, 9, 10 and 11, 1940, immediately prior to the annual meeting of the American Medical Association in New York City.

Application for admission to Group A, Part II, examinations must be on file in the Secretary's Office not later than March 15, 1940. Formal notice of the time and place of these examinations will be sent each candidate several weeks in advance of the examination dates. Group A, Part II, candidates will be examined on June 8 and 9, and Group B, Part II, on June 10 and 11, 1940.

The annual dinner of the Board will be held in New York City on Wednesday evening, June 12, 1940, at the Hotel McAlpin.

For further information and application blanks, address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh (6), Pa.

Correspondence

SOCIAL SECURITY BOARD,  
Washington, D. C.,

Office of the Regional Director,  
Region I, 120 Boylston Street,  
Boston, Massachusetts.

January 25, 1940.

DR. FRANK JACKSON,  
Maine General Hospital,  
Portland, Maine.

Dear Dr. Jackson:

No one is more familiar with the family problems caused by death than the doctor in whose care the family has entrusted its well being. Beyond the sorrow and personal bereavement, the doctor is only too painfully aware of the economic problems which the death of a breadwinner may bring to a family. Yet, in many cases, he is powerless to assist when more than his own medical services are needed.

The new provisions of Federal Old-Age and Survivors Insurance, effective January 1, 1940, may have an abiding interest for doctors as a means of eliminating, or at least reducing substantially, the economic misfortunes occasioned, in many cases, by death. A brief summary of those provisions which might be of special interest to the general family practitioner follows.

New survivors benefits are payable on the death of an insured wage earner after December 31, 1939. In contrast with the old-age payments after age 65, survivors benefits are payable without regard to the age of the deceased. In all cases, the person on whose wages the benefits are based must have been a wage earner in business or industry, after 1936, and must meet the eligibility requirements. Detailed information of these requirements may be obtained from any of the forty-four field offices of the Social Security Board, located in the principal cities of New England.

Kinds of Survivors Benefits

- 1. Monthly cash benefits for insured wage earner's widow, after age 65, until she remarries or dies.
- 2. Monthly cash benefit for insured wage earn-

er's widow, regardless of her age, while she has in her care deceased's unmarried dependent children under age sixteen, or under age eighteen if still attending school.

3. Monthly cash benefit for insured wage earner's unmarried dependent child or children, under age sixteen, or under eighteen if still attending school.

4. Monthly cash benefit for insured wage earner's dependent parents, after age 65, if no widow, or child under eighteen survives.

5. Lump sum if insured wage earner leaves no survivors immediately entitled to monthly benefits.

Examples of Survivors Benefits

With 3 years of Coverage			
Average Monthly Wage of Deceased Worker	1 Child or Parent 65 or over	Widow 65 or over	Widow and 1 Child
\$ 50 .....	\$10.30	\$15.45	\$25.75
100 .....	12.87	19.31	32.18
150 .....	15.45	23.17	38.62
250 .....	20.60	30.90	51.50

With 5 years of Coverage			
\$ 50 .....	\$10.50	\$15.75	\$26.25
100 .....	13.12	19.69	32.81
150 .....	15.75	23.62	39.37
250 .....	21.00	31.50	52.50

With 10 years of Coverage			
\$ 50 .....	\$11.00	\$16.50	\$27.50
100 .....	13.75	20.62	34.37
150 .....	16.50	24.75	41.25
250 .....	22.00	33.00	55.00

Complete information on this subject may be obtained by directing the inquiry to "Social Security Board Field Office," at the nearest of the following locations:

Maine—Augusta, Bangor, Lewiston and Portland.

Sincerely yours,  
JOHN PEARSON,  
Regional Director.



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## Book Reviews

### *"Psychobiology and Psychiatry—A Textbook of Normal and Abnormal Human Behavior"*

By Wendell Muncie, M. D., Associate Professor of Psychiatry, Johns Hopkins University; Assistant Psychiatrist, Henry Phipps Psychiatric Clinic, Johns Hopkins Hospital, with a Foreword by Adolf Meyer, M. D., LL. D., Sc. D., Henry Phipps, Professor of Psychiatry and Director of the Department of Psychiatry, Johns Hopkins University, with 69 illustrations.

Published by The C. V. Mosby Co., St. Louis, 1939. Price, \$8.00.

It is not too much to say that the book under review represents a new star ascending on the horizon of medical literature. During the life of Hippocrates (460-377 B. C.) theories concerning human health, welfare, sickness and behavior in relation to responsibilities of the individual to society and of society to the individual were first published. Most of the time between then and 1900 A. D., or thereabouts, has been filled with all kinds of benign and malignant attempts to prove or disprove their correctness. Especially effective was the fight which was carried on incessantly by many of man's spiritual advisers against the physician's right to serve man in all of his infirmities and complaints as man as a whole, as a human being composed of body, soul, and spirit, or soma, psyche, and pneuma, or physical structure, vital function, and intellectual action.

For some 25 years now one man has dared to stand out as the sole champion of the defense of the theory that man as a whole constitutes the rightful field of action of the practicing physician as a whole. In other words, the physician alone is privileged by virtue of a broad education and duty bound by profession to study man as an entirety, as a normal integrated being, as well as an abnormal, disintegrated being who needs a fully trained physician's help. Dr. Adolf Meyer, in 1913, actively began to teach what he called psychobiology to medical students and graduate physicians in theory and in practice. By untiring efforts he has succeeded in teaching to American physicians how to view the American scene of human behavior and while doing this he has built up an American psychiatry and mental hygiene.

The present book, written by Dr. W. Muncie at the invitation of Dr. A. Meyer may be looked upon as a monument not only to the Greek theory that the physician must aim to treat the whole man, as expounded by Hippocrates, but also to the American theory that Human Behavior is the result of interaction of all the parts of an individual as a whole in relation with its environment as expressed and defended by Dr. Meyer. This unitary activity of the individual constitutes the material with which psychobiology is built. Dr. Meyer chose to employ terms derived from the Greek. Thus *ergasiology* (*ergasia* = work, labor) is the study of human behavior, both normal and abnormal, or, to say it in the author's terms, integrated and disintegrated behavior with special reference to the so-called mental aspects of living.

*Ergasia* = normal behavior.

*Pathergasia* = abnormal behavior.

*Oligergasia* = static constitutional reaction types (feeble-mindedness).

Merergasia = (meros = part) plastic maladjustment (psychodynamic) reaction types, otherwise designated by such terms as psychoneuroses, neuroses, or minor psychoses.

Holergasia = major reaction types of the so-called manic depressive depressed and the agitated depressed groups.

Thymergasia = elations of the so-called manic depressive manic group.

Parergasia = paranoia and paranoid states; also the various forms of schizophrenia or dementia praecox.

Dysergasia = all the toxic, infectious, metabolic, circulatory and traumatic support disorders.

Anergasia = all organic deficit reaction types.

These terms are comparatively easy to learn and assume their proper meanings when it is fully understood that the study of man according to his psychobiological functions deals with native assets, such as instinctual performances; fundamental organismal rhythms of waking, sleeping, variations in capacity and capability, intellectual variation according to endowment; acquired skills; basic moods and their variations; habits; memories; ambitions, strivings and visions of anticipations and opportunities; imagination and fancy; reasoning, as well as abnormal or socially not acceptable variation from them as seen by the physician and especially the psychiatrist.

Above all, psychobiology deals almost exclusively with human beings because it practices what it teaches; namely, that no amount of animal experimentation will ever unlock for us the realms of human mentation, intellection, imagination, reasoning, symbolization and verbalization of the

processes of human feeling, thinking, doing. Probably due to the fact that the concept of human triunity has provoked an almost endless chain of argumentation from various angles leading nowhere so far as actual benefits for the suffering individual is concerned, psychobiology or ergasiology teaches that man is a unit being, capable of considerable individual self-sufficiency, capable of adaptability to an indefinite number of adjustments to environmental variations and that under the strain and stress of these enforced readjustments the individual at times becomes confused, over-stimulated, over-tired, or frankly sick. Knowing the normal behavior of a person the physician called upon to treat that person when ill at ease or dys-eased permits him to evaluate the amount of variation from his normal standard and then attempt to re-establish confidence in himself and prepare him to take up once more successfully his place in an environment most favorable to his make-up, so far as this is possible.

There is a great need for a philosophy, a science of man, and a method of teaching the theory and practice of medicine which will include all that we know of chemistry, physics, anatomy, biology, etc., and all those things which are peculiarly human, commonly called mental things, and are not, so far as we know and can determine, shared by other things and beings in nature. Dr. Adolf Meyer is the founder and Dr. Wendell Muncie the promoter of this new teaching, and "Psychobiology and Psychiatry" is their tool with which, let us hope, they shall successfully establish this reasonably practicable theory and practice of studying and treating the human organism as a whole humanly. Such a truly pragmatic American piece of pioneering workmanship in the field of mental health and disease as this deserves respect, admiration and diligent emulation.

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\*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

**JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA, PA.**



### *"Nutrition and Diet in Health and Disease"*

By James S. McLester, M. D., Professor of Medicine, University of Alabama, Birmingham, Alabama. Third Edition; entirely rewritten.

Published by W. B. Saunders Company, Philadelphia and London, 1939. Price, \$8.00.

Due to the fact that concepts of nutrition are constantly changing, this remarkable volume appears in a greatly changed form. It has been rewritten in its entirety. The newer discoveries are included in the text, either as additions to older and tried methods or as substitutions for methods which have been sufficiently tried but found unsatisfactory. It is well that the physiologic influences of nutritive substances have been described at some length in many instances. This makes possible a better understanding of what is needed in the way of dietary management to relieve pathologic variations of function which may be directly or indirectly due to dietary mismanagement, defective metabolism, or to disease-processes.

There are two excellent chapters on such spe-

cialized forms of feeding as that of the surgical patient and of the infant. The former was written by Dr. Dean Lewis, Professor of Surgery at Johns Hopkins University; the latter, by Dr. P. C. Jeans, Professor of Pediatrics at the State University of Iowa.

Since life, growth, reproduction, the production of energy, replacement of waste products and the repair of the body in its microscopic function as well as its macroscopic performances depend wholly upon nutrition of various forms, it behooves everyone to learn as much as possible about the most appropriate materials commonly used as food as well as the most palatable methods of preparation and the most effective presentation of the meal which we are to consume for greater enjoyment, better health, and for the relief of disease-like undernourishment of some parts or the whole of the human organism. Dr. McLester here presents a wealth of highly desirable and widely usable information. The 817 pages of text are supplemented with over 800 bibliographic references. The applicability of this work seems to be almost universal in all medical problems where dietary measures play a part in their solutions.

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# The Journal of the Maine Medical Association

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Volume Thirty-one

Portland, Maine, March, 1940

No. 3

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## *Modern Anesthesia*

Panel Discussion presented at the fall clinical session of the Maine Medical Association at Waterville, Maine, Wednesday, October 25, 1939, under the auspices of the Committee on Graduate Education, Frederick T. Hill, M. D., Waterville, Chairman.

George L. Pratt, M. D., Farmington, President of the Maine Medical Association, called the meeting to order at 8:00 P. M.

PRESIDENT PRATT: The meeting will please come to order, Ladies and Gentlemen.

I would like to express our appreciation to the doctors of Waterville for the excellent arrangements that they have made during the day and this evening, and also tomorrow and tomorrow evening. I attended three conferences today, and they were all very interesting.

I am also glad to remind you of the New England Post Graduate Assembly, which meets in Boston the last day of this month and the first day of November. They have arranged an excellent program, and those who can go would feel well repaid, I am sure.

It is unnecessary to tell any medical audience that the name of Professor Paul Ehrlich of Germany, the discoverer of Salvarsan and known to every medical man in the world, is one of the great names in medicine. We cannot understand, unless, perhaps, there are alienists among us, the mentality of a govern-

ment that would wish to drive the citizens like Professor Ehrlich and his family out of their country.

We have a member of Professor Ehrlich's family with us tonight, and I should like to tell her that we are glad to have her in our country and here with us tonight. It gives me great pleasure to introduce the daughter of Professor Ehrlich, Mrs. Landau. [Applause.]

MRS. LANDAU: I am very happy to be here. I have been in the United States with my father many years ago, back in 1914, before I married. My father made some fine friends here, and he always said it was the most beautiful country he ever knew of, and if he were ten years younger, he would stay in this country. I happen to share that thought, too, and I want to thank you for such nice words you have said about my father.

I thank you very much. [Applause.]

PRESIDENT PRATT: The rest of our meeting tonight is composed of a panel discussion. Now, the Chairman of our Graduate Education Committee knows all about Panel Discussions. I think he might well be called the father of Panel Discussions in Maine.

I am pleased to turn the meeting over to Dr. Hill at this time. [Applause.]



CHAIRMAN HILL: Mr. President, Ladies and Gentlemen. The Committee on Graduate Education was unanimous in selecting as the subject of this evening's program "Modern Anesthesia."

It is no longer a question of merely getting someone to pour ether. This work is concerned with safeguarding patients. We also felt that a great deal of this development and progress is due to some of the men we have with us as guest speakers this evening.

Now, if we are honest with ourselves, we will have to admit that here in Maine, we are quite a bit deficient, in this idea of modern anesthesia. So, we hope to bring out, in this panel discussion tonight, some of these problems, some of these considerations, which should be of marked benefit to us all.

We have an all-star cast tonight, and it is a great pleasure to introduce them to you. Dr. Howard Clute needs no introduction, really, to anyone in Maine. [Applause.] You all know about him. He is representing Surgery in this panel.

Dr. M. Fletcher Eades of Boston, of the Staff of the Boston Lying-In Hospital, is representing the obstetricians. [Applause.]

Dr. Sidney C. Wiggin of Boston, Director of Anesthesia at the Faulkner Hospital, and on the faculty of Harvard Medical School, is another member of our panel. [Applause.]

Dr. Gilbert Clapperton of Lewiston, a man who is bringing real anesthesia into the State of Maine, is also a member of our panel. [Applause.]

And last, but not least, Dr. Paluel J. Flagg of New York, a noted author and authority on anything pertaining to anesthesia, a man whom we all look up to and greatly admire, is a member of our panel. [Applause.]

Dr. Flagg is going to summarize this discussion, and then he will speak on some other phases of allied gases, resuscitation and the use of gases in the treatment of clinical disease.

I might state the rules of the panel. It is expected that no member of the panel will really get away with a prepared speech, because everybody else on the panel can object at any time and can ask questions and interrupt.

We are not going to have discussion from

the floor, except in writing. Anybody is invited and urged to send questions or objections in writing up to the table, and those questions will be referred to the members of the panel and discussed by them.

After those preliminary remarks, we will proceed to a consideration of "Modern Anesthesia." First, I am going to call upon Dr. Howard M. Clute of Boston, who will speak from the viewpoint of the surgeon. Dr. Clute, what do you want from your anesthetist?

### **Anesthesia from the Viewpoint of the Surgeon**

**By Howard M. Clute, M. D.,  
Boston, Massachusetts**

DR. CLUTE: Mr. Chairman and Gentlemen. I just can't picture modern surgery without a competent, well-trained anesthetist at the head of the table.

From my own personal point of view—I am now talking about elective surgery and not, of course, discussing such things as emergency or traumatic work for which one can't always have all the things we want to have—for a man who is planning an operation ahead of time, such as a gallbladder, stomach or hysterectomy, I consider the anesthetist a part of the team, which is fully as important as any other part and just as necessary.

I don't care how good a surgeon you are, and I don't care how many hundreds or thousands of operations you have done; if you have a patient who is straining and pushing the intestines out, and whose recti muscles are like pieces of board through which you have to struggle, you are going to look like a house officer doing his first case. I don't know any part of a surgical team that I could not do without more readily and more safely, from the point of view of the surgeon, and from the point of view of the patient's safety, than the accomplished and finished anesthetist.

As Dr. Hill said to me earlier this evening, "they measure your successes by your failures in this world." Certainly, then, if a surgeon is going to have his success measured by his failures, as he is very apt to have, he must be as positive as he can in protecting himself

from failures. The first step in abdominal surgery is to have a patient whose muscles are relaxed. If you can see it, you can do it; if you can't see it, you have got to be pretty good to do it.

You must also have a patient who is safely anesthetized, who is going to recover from the anesthesia, at least, and who is in a satisfactory and comfortable condition all the time.

The first thing that I want from the anesthetist, of course, is anesthesia. I have no use for the kind of anesthesia, which consists of sticking a needle into a man and saying, in effect: "You are anesthetized." And then, when the incision is made, if the man complains, no account is taken of his suffering. I want an anesthetist who has something else up his sleeve, and who can use other methods if his first attempt gives poor anesthesia.

I want an anesthetist who is accustomed to working with me, and who is a part of the team, because I am convinced that team play is more important in surgery, perhaps, than it may be in any other branch of medicine. I feel very strongly in this matter, and perhaps I am unusual in this, too; I feel that if a surgeon wants an anesthetist because he believes that without an anesthetist he can't do good surgery, because he believes that if he doesn't have good relaxation and the safe carrying-out of the anesthesia he is going to suffer very materially himself, then he has got to pay the anesthetist a reasonable return for his special work.

DR. WIGGIN: You don't mean that you pay for anesthesia?

DR. CLUTE: No. The anesthetist runs his business and sends his own bills just as I do.

On the other hand, a patient has only so many dollars he can spend for his medical care, and if the surgeon permits the anesthetist to have a good fee there will be fewer of those dollars left for the surgeon. I fear it is for this reason that some surgeons are content to retain the old time low-priced etherizer. If, however, the surgeon wishes to develop a good team he must first realize that he has to pay for this by permitting the anesthetist to charge fees compatible with his importance in that team.

DR. EADES: As a surgeon, what do you expect from the anesthetist?

DR. CLUTE: I expect a great deal from the anesthetist. If the anesthetists are going to be specialists; if they are going to call for the fees that specialists receive because they are specially trained, they have got to give special services. In the first place, I expect them to go and see the patient at least a day before the operation. I expect them to read the patient's history and know whether we are going to operate on a gallbladder or a fibroid uterus. I expect them to know whether we are going to operate on a substernal goiter or not, and I expect them to know whether or not we are going to operate upon a poor risk or a very good one. I expect them to read the laboratory sheet and to know and be familiar with these sheets, and to order special tests when they feel they are needed. I expect them to gauge the anesthetic agent on what the individual patient can handle, what the operation is to be, and who the operator will be.

DR. CLAPPERTON: Who prepares your patient, Doctor?

DR. CLUTE: I prepare the patient for operation. For instance, if they have hyperthyroidism, I do what I can to get them ready for surgery. If they have diabetes, I have a medical man take care of them. But, I certainly don't have anything to do, nor do I think I should have anything to do with the actual preparation of the patient for his anesthesia. That, I leave to the anesthetist; that is, whether they shall have nembutal at night, and whether they shall have preliminary medication in the morning and how much they shall have—all of that I leave to the anesthetist.

Furthermore, I expect the anesthetist to be quite familiar with the patient and her problems. My anesthetist happens to be Dr. Eleanor Ferguson, for which I am very grateful. If she looks at this patient at night and thinks that she, perhaps, has a cold, a fever or has something wrong with the kidney function, or what-not, she cancels the operation and informs me that the operation has been called off. That is how much I depend upon the anesthetist.

DR. FLAGG: Dr. Clute, may I ask the



agent that you prefer for the various fields of operation?

DR. CLUTE: I might start by saying, again, that when I prefer these things, I have come to prefer them because my anesthetist uses them and they work; therefore, I like them. If they didn't work, I would think, probably, that they weren't so good.

For goiters, with high toxicity, I prefer cyclopropane and oxygen, because the oxygen can be maintained at a high level, and recovery from anesthesia is rapid.

For abdominal surgery, especially upper abdominal work, I like spinal anesthesia, with the new methods of giving it. Nupercaine, one to fifteen hundred solution, will give anesthesia for two or three hours if need be for a very long stomach operation. Then there is pontocaine glucose solution for the ordinary things, like gallbladders, appendices, herniæ, etc.

I still think that ether is a great anesthetic agent, if you can find someone who knows how to give it, but I think it does very definitely require expert giving.

I think in surgery of the chest, cyclopropane, with oxygen, is excellent. The use of intra-tracheal catheters, through which the gas is given, has, in our experience, been very valuable in any case in which respiratory obstruction may occur.

DR. HILL: Dr. Clute, how long do you feel that the anesthetist should carry on in the post-operative care of the patient? Where should he leave off?

DR. CLUTE: I feel that the anesthetist is responsible for the patient from the time that he puts him on the table and starts the anesthesia, until he gets him back in bed again and until the patient has recovered from the anesthetic agent. That is, I don't think it is enough to dump the patient on a truck and send the truck downstairs with the nurse or orderly; I think the anesthetist should see that he gets into bed and see that he is not going to swallow his tongue or choke to death, or go into shock. He should be certain that the patient be kept covered and warm. If he needs intravenous fluid, I would expect the

anesthetist to order or give it, if need be. If he needs oxygen, or a tent, I would expect the anesthetist to order it and start it. As a matter of fact, all the oxygen therapy in our hospital is in the hands of the department of anesthesia. I expect that if the patient gets downstairs and is uncomfortable and suffering with pain, the anesthetist would see that he gets immediate medication that relieves the pain.

From that time on, I want to take over myself.

I expect the anesthetist, however, to get back to see the patient the next day, so that he will know how this patient is doing, as a result of the anesthesia, and he will know whether it is a good type of anesthetic agent to use in the future.

DR. CLAPPERTON: What do you think about the practice of the surgeon giving the anesthesia, going around to the other end of the table and performing the work?

DR. CLUTE: I would be scared to death of that procedure. I have the greatest respect for the spinal, but it is a dangerous method of giving anesthesia unless you know how to recognize the early symptoms of respiratory or cardiac failure, or of increasing height of the anesthesia. I, for one, would never be a party to giving spinal anesthesia myself, and then going around to the other end of the table to operate, leaving the patient to be watched by a person who is not completely familiar with the first and the earliest signs of heart failure or respiratory failure, or the shock that goes with the rising height of the spinal anesthesia.

DR. HILL: You would not advise spinal anesthesia, for ear, nose and throat work, would you?

DR. CLUTE: No, there are many other anesthetic agents far safer and better for the upper parts of the body than spinal. Do you use spinal anesthesia in obstetrics, Dr. Eades?

DR. EADES: We have some.

DR. HILL: This is a good point to introduce Dr. Eades, who will carry on the discussion from the viewpoint of the obstetrician.

## Anesthesia from the Viewpoint of the Obstetrician

By M. Fletcher Eades, M. D.,  
Boston, Massachusetts

DR. EADES: Several general considerations concerning administration of analgesic and anesthetic drugs during labor should be reviewed. First, the woman in labor may present a serious anesthetic risk due to her basic lack of preparation. She may and quite commonly does enter the hospital in labor having recently ingested a meal. It is a matter of common clinical observation that food taken 12 or even 24 hours prior to anesthesia remains in the stomach during labor and may be vomited at the time of delivery. This is a serious matter, and may result in such complications as atelectasis, pneumonitis, broncho-pneumonia, lung abscess, and even death by suffocation if large quantities of gastric contents are insufflated.

Second, the woman in labor may present serious or chronic complications of pregnancy which in themselves increase the risk and limit the choice of the anesthetic. Such complications as severe nephritis, malignant hypertension, pre-eclamptic toxemia, acute and chronic pulmonary conditions, decompensated heart disease, and acute hemorrhage from placenta previa and premature separation of the normally implanted placenta present a constant challenge in the proper selection and use of anesthetic drugs.

Third, the presence and condition of the fetus may affect the choice of the anesthetic agent. Eastman, Smith, and others have shown that in utero the child normally is in a condition bordering on anoxemia. Added to this may be such factors as prematurity, or debility of the fetus from either long labor or hemorrhage. It is essential that the anesthetic used for delivery does not further jeopardize the chances of the child.

Clifford has shown that the premature child tolerates opiates poorly. Smith has recently completed important studies of the blood gases on mother and fetus at the time of delivery under different anesthetic agents. The fetal blood was best oxygenated under oxygen and ether anesthesia, next under cyclopropane and oxygen, and poorest under nitrous oxide oxygen ether.

DR. CLUTE: What do you do for a woman having fits?

DR. EADES: We don't give anesthesia. We try to quiet her down with sedation, morphine.

DR. CLUTE: Well, you have to get the baby out, don't you?

DR. EADES: Not right away. We have to cure the fits first.

DR. CLUTE: What do you do if you want to get the baby out? I don't know much about obstetrics. What about the anesthesia in the woman with toxemia?

DR. EADES: There is some difference of opinion as to the choice of anesthesia in pre-eclamptic toxemia. In abdominal operative procedures in this group of patients, my preference is for spinal or cyclopropane anesthesia. Spinal anesthesia has no effect on the liver or kidneys, both of which may be involved in the toxemias. The child is not affected by spinal anesthesia, and the excellent tone of the uterus following birth of the baby, plus the relaxation of the abdominal muscles are important advantages.

I have been favorably impressed with the effects of cyclopropane in the toxemias. It provides excellent oxygenation of the patient and the baby, both of whom in the severe pre-eclamptic have a tendency to anoxemia. Administered by an experienced anesthetist it gives adequate relaxation for all abdominal obstetric operations. For pelvic delivery, I think local anesthesia, either as sacral or local block of the perineum is useful. If the delivery is to be operative, low spinal is to be preferred.

DR. CLAPPERTON: What about the diabetics?

DR. EADES: In mild, well-treated cases I see no reason why nitrous oxide oxygen ether is contraindicated. In the more severe diabetics where there is a tendency to acidosis or if pre-eclamptic toxemia is a complication, I believe spinal is best adapted for abdominal operative procedures. For the pelvic deliveries in this group some form of local infiltration or block seems indicated.

DR. WIGGIN: How about the pregnant woman who has the complication of a respiratory infection?

DR. EADES: That always presents a seri-



ous problem with analgesia and anesthesia. If we assume that local or block anesthesia will lower the incidence of post-operative pulmonary complications, then there is no question of choice. This is still a controversial matter. Personally, I have always leaned toward the use of either spinal or local infiltration anesthesia in this group for abdominal operations. In pelvic deliveries or operations local infiltration or block gives satisfactory results.

For analgesia the barbiturates are contraindicated in acute respiratory infection. Morphine and scopolamine analgesia gives the best results in these cases.

DR. FLAGG: How about the cardiacs?

DR. EADES: In the compensated pregnant cardiac patient any of the inhalation anesthetic agents may be employed so long as the patient is well oxygenated. In cardiacs there is a high fetal mortality due we believe to prematurity and anoxemia. For that reason the anesthetic agent used should be one which does not of itself produce anoxemia.

The decompensated cardiacs are desperate risks under any circumstances. I should use either ether and oxygen, cyclopropane, or local infiltration anesthesia, depending upon the situation.

DR. WIGGIN: What do you use for normal labor and delivery?

DR. EADES: I shall answer that briefly because of the time at my disposal.

Innumerable combinations of drugs have been used. Probably the barbiturates as basic drugs form the most commonly used group today. The combination of the barbiturates with some amnesic drugs have to date proved the most satisfactory. Pentobarbital (nembutal) and scopolamine has proved a moderately satisfactory analgesic combination. As time has gone on we have noted toxic reactions in occasional patients, and the trend has been toward lower initial and total doses. Seconal, sodium amytal, and scopolamine is another combination recently used which in general seems to be less toxic.

The anesthetic agents commonly used for normal delivery are ether and nitrous oxide oxygen with or without ether sequence.

Ether has been and continues to be our mainstay in obstetrics, both in the home and

in the hospital. In spite of its unpleasant after effects, its wide margin of safety in skilled and unskilled hands recommends it strongly. It supplements the analgesic drugs well and gives the best results when administered by one experienced in its use. To prevent anoxemia it may be given with the open cone or combined with oxygen by machine.

Nitrous oxide oxygen has generally been held to be one of the safest general anesthetics. It has been widely used in obstetrics since 1912, especially in dilute mixtures as an analgesic agent. Used in high concentrations as an anesthetic nitrous oxide is dangerous because of the asphyxia produced with sometimes fatal collapse of the patient as a result. Courville, Stewart, and others have demonstrated extreme brain injury in such cases as shown by autopsy studies. When the administration of nitrous oxide is preceded by proper medication so a relatively high percentage of oxygen can be given, or if it is combined with ether so more oxygen can be used it constitutes one of our best general anesthetics. Induction with this anesthetic is pleasant; it is extremely flexible; and the combination supplies any degree of relaxation required. Unless used with a high percentage of oxygen it does increase the anoxemia of the child. From these considerations it is evident that it should be administered by one expert in its use.

DR. CLUTE: When do you use spinal anesthesia in obstetrics?

DR. EADES: There are still widely divergent opinions concerning the use of spinal anesthesia in obstetrics. My own experience has been entirely favorable if this type of anesthesia is confined to selected cases, used on definite indication, and is properly administered with novocaine dosage not to exceed 100mg. or a relative total dose of pontocaine and novocaine, effective, safe anesthesia can be induced sufficient in length of time for any major obstetric operation. Its most useful application in obstetrics is for operative procedures in the pre-eclamptic group or on patients with acute respiratory diseases. It is distinctly contraindicated in patients with severe hypertension, hemorrhage, shock, or those in the poor risk group. Expert ad-

ministration and observation during anesthesia is especially important with this type of anesthesia if untoward effects are to be avoided.

DR. WIGGIN: What is your opinion of organized anesthesia in relation to obstetrics?

DR. EADES: I believe that in obstetrics we have been slow in accepting some of the developments concerned with better administration of anesthesia. There is no one item in the practice of obstetrics today that is so much needed or will contribute so much to the patient's safety and the obstetrician's satisfaction as expertly administered anesthesia. The physician anesthetist is indispensable for the administration or supervision of administration of the various anesthetic drugs. With his particular knowledge he is able to make the best choice of anesthetic agents for the individual case. He has knowledge of the physiology of respiration and circulation and by his careful observation of the patient anticipates such untoward reactions as are preventable.

Last but not least, the trained anesthetist's assistance is invaluable in resuscitating the asphyxiated infant, when all too often the mother's condition demands the constant attention of her medical attendant. Any organization of these facilities can only promote the quality of obstetric practice.

DR. HILL: Dr. Eades, I think you have covered the field of obstetrics very well. You have been "on the spot" gracefully. I should like to put Dr. Clapperton "on the spot" now.

### **Anesthesia from the Viewpoint of the Anesthetist**

**By Gilbert Clapperton, M. D.,  
Lewiston, Maine**

DR. CLAPPERTON: There are several important features in having a patient admitted to the hospital twenty-four to forty-eight hours before operation.

First, it gives the patient a chance to become accustomed to a strange and new environment. It allows time for a careful and complete history, physical examination and necessary laboratory data. This laboratory data should include urine analysis and complete blood count. Other tests, such as blood

chemistry and kidney function, should be carried out where indicated.

We feel that the anesthetist should visit the patient the day before operation, at which time he should carry out an examination himself of the heart, lungs, the blood pressure, and the upper respiratory passages, and inquire as to previous anesthetic experiences.

DR. CLUTE: Of course, that doesn't hurt the anesthetist at all, when he sends his bill around later, his having been acquainted with the patient.

DR. CLAPPERTON: That is true.

DR. WIGGIN: What determines your choice of drugs and agents in anesthesia?

DR. CLAPPERTON: In brief, probably the main factors that determine the choice are the age of the patient, the size of the patient, the physical status and pathology we are dealing with, and the metabolic rate.

I might say a word about pre-medication here. We hear a lot about that nowadays, and you might ask, "Of what value is it?" Well, we use pre-medication because it reduces the metabolic rate and allows deeper level of anesthesia with a lower concentration of the agent. Pre-medication by reducing the patient's metabolic rate, reduces the reflex irritability, which, in turn, reduces the anesthesia resistance, which we all possess. I think we are accused of the tendency to use too much pre-medication. However, we probably find ourselves giving too much to the old and too little to the young. The metabolic rate varies markedly throughout the age of the individual. It is higher in the adolescent. Patients from six to eighteen years of age require more pre-medication and more anesthesia, than the other two extremes.

In regard to choosing the anesthetic agent, we have three people to consider: the patient, the surgeon and the anesthetist. To the patient, the choice of an agent may simply mean some agent whereby he may go to sleep in a hurry, or where he may have no recollection of leaving his room and going to the operating room, or some agent whereby he may not be nauseated, on recovery.

To the surgeon, it means marked relaxation, in order to facilitate his work.

To the anesthetist, I think each case has to be individualized. You have to think of your



patient first, and then make use of what agents and methods you have at hand. It also depends upon the individual anesthetist's skill and ability.

I think that all patients should not be adapted to one agent; I think that you should take your agents and adapt them to the patients.

DR. FLAGG: In your administration of anesthesia, what important details do you observe, Doctor?

DR. CLAPPERTON: During anesthesia or in the administration of an anesthetic, one should be familiar with the effect of the drugs he is using upon the physiology of circulation and respiration, throughout three stages; that is, the stages of induction, maintenance and recovery. He should also be able to recognize early, and institute treatment in complications that might arise from the anesthesia or from surgery, such as shock, hemorrhage, vomiting, excess carbon dioxide or oxygen want and respiratory obstruction.

DR. CLUTE: You asked me, I think, who should do the post-operative care of these surgical patients, the anesthetist or the surgeon. Now, just how far do you anesthetists think you ought to go anyway with this post-operative care?

DR. CLAPPERTON: I think that we feel as you do, that our job isn't complete when we leave the operating table. We should more or less keep an eye on the patient for twenty-four hours, post-operatively. There is a period of recovery wherein the anesthetist should play an important role. Knowing how his patient has reacted to the drugs and agents already given and to what degree of shock he has suffered, the anesthetist should be in a position to advise or order the immediate post-operative measures including sedation, posture, fluids, transfusions, and oxygen therapy.

I do feel that there are times throughout the patient's hospital stay that it might be wise for the anesthetist to visit the patient again, with the permission of the surgeon, so that he might see what effects, good or bad, his choice of agent had upon this particular patient.

At all times, he should be willing to consult with the surgeon and assume responsibility of

complications arising directly from the anesthesia.

DR. FLAGG: Are there any other conditions beside the administration of the anesthesia that the anesthetist can be useful in?

DR. CLAPPERTON: In the past few years, anesthesia has branched out and taken within its scope, several other items. Oxygen and helium therapy finds a place in the treatment of cardiacs, pneumonias and asthmatics. Convulsive and excessive excitement stages can be treated by the anesthetist, with his knowledge of the barbiturates, paraldehyde, etc. Diagnostic and therapeutic nerve blocks in many institutions are handled by the Anesthesia Department.

Dr. Eades has covered the value of anesthesia in the department of obstetrics.

In regard to resuscitation, based on a sound physiological basis, I will not comment on that, because I am sure that Dr. Flagg will take that question up later.

DR. HILL: Dr. Clapperton, I am sort of interested as to how one would go about organizing just such a Department of Anesthesia, as you suggest, in any given hospital. How are you going to accomplish that?

DR. CLAPPERTON: I think I will pass that question on to Dr. Wiggin, who has had experience along that line.

### Regarding an Organized Department of Anesthesia

By Sidney C. Wiggin, M. D.,  
Boston, Massachusetts

DR. WIGGIN: First, an organized Department of Anesthesia benefits the patient by abolishing fear and apprehension. It safeguards the patient from anesthesia accidents, by proper preparation for anesthesia and choice of anesthetics by the best administration possible, by early recognition of the complications and treatment of these complications during anesthesia.

In the post-operative care, insofar as the anesthetist knows the condition of the patient during the operation, the effects of surgery and anesthesia on that patient, he can better tell what drugs and what dosage should be used, the fluids the patient needs and the posture the patient should be placed in as a result of the anesthetic administered.

It reduces morbidity and mortality and shortens the period of convalescence. All patients get the same expert care, whether private, semi-private, ward cases or service cases.

The surgeon benefits by being relieved of responsibilities before, during and after operation. It allows the surgeon to perfect his technique in surgery and also allows him to do operations that before the organization of anesthesia were almost unheard of, for example the developments in chest surgery, abdominal surgery, brain surgery, thyroid surgery and many others.

DR. HILL: How do you get this Utopia that you are talking about? How are we going to get it in the ordinary hospitals?

DR. WIGGIN: I am coming to that. It benefits the hospital by approaching the ideal of hospital organization, with a competent physician in charge of the department. It reduces the cost of anesthetic supplies and equipment by intelligent supervision and maintenance of supplies and equipment by the anesthesia department. There is more hospital business created by a greater turnover of patients and more satisfied patients. There is a smoother running of the operating room. There is less nursing required, both in the operating room and in the wards, due to the fact that there is less post-operative care necessary.

DR. EADES: What is the personnel set-up of the organization?

DR. WIGGIN: First, we have to consider the qualifications of the anesthetist. The anesthetist should be a graduate of a Grade A medical school. He should have an internship of one to two years in surgery preferably, or a rotating service. He should have a training in anesthesia of one to three years' residency, and should also be a member of the County Medical Society as well as the local and national anesthesia societies, in order to classify him properly. The head anesthetist should be empowered with the same authority as the heads of the other departments of the hospital.

DR. CLUTE: Don't you think you could make an anesthetist out of a fellow who has been in practice ten years, without all of that?

DR. WIGGIN: Absolutely, it can be done easily, and it is what is being done in many hospitals throughout the country.

Now, the different types of hospital and the personnel of the departments vary. For instance, in the teaching hospital connected with the medical school, we have the Director of Anesthesia, Assistant Director, and sufficient residents to cover the amount of operating done and the teaching of medical students and nurses. At the Bellevue Hospital, they figure on three anesthetists for five thousand operations, and one additional anesthetist for every additional two thousand, up to ten thousand operations.

There is a second type of large hospital which hasn't teaching connections with the medical school. The first type, as mentioned, would be typified by Bellevue Hospital in New York, the second type is the large city hospital, such as are located in Hartford, Connecticut, with about 1,000 beds, where they have a Director of Anesthesia, Assistant Director and resident anesthetist sufficient to cover the needs of the operating floor.

In the smaller cities, with less population, having smaller hospitals of about three hundred beds or a little over, such as the hospitals in the cities in Maine, we would expect a Director of Anesthesia with an Assistant and sufficient residents to take care of the needs.

Then we come to the smaller hospitals in the small communities, the community hospitals, of which there are many in all states, consisting of twenty-five to one hundred beds. Here we can develop the anesthetist that Dr. Clute asks about. In other words, there isn't sufficient work for a trained specialist, who has devoted several years to his residency in anesthesia, after completing his internship; therefore, the local practitioners on the staff of the hospital make very good anesthetists. Of course, it is necessary that these men have sufficient internship and also that they have a special interest in anesthesia; they should also have some training in anesthesia before taking over these duties. They should at least go away to the medical centers and get a few months' post-graduate training, brushing up their knowledge of anesthesia, sufficient for them to develop their own ability at the hospital.



DR. CLUTE: How do these fellows get paid?

A VOICE: They don't! [Laughter.]

DR. WIGGIN: It is very simple. But, before I answer that question, Dr. Clute, I might say that where the hospital is large enough to have more than one anesthetist, a younger member of the staff just coming from his internship makes an excellent assistant to develop in anesthesia.

Now, these members of the staff will not have sufficient work to keep them wholly in anesthesia, but they will be able to carry on some practice. Some men do some other specialty, such as obstetrics or cardiology, while a good many carry on general practice.

We have several hospitals within the radius of eight miles of Boston, which in the last five years, have adopted this policy and found it very successful.

Now, as to how to pay all these anesthetists. The positions in the teaching hospitals are rapidly developing into salaried positions, principally because the head anesthetist is a full-time professor of anesthesia, while his assistants are salaried faculty members of the medical school. The residents are on a salary, as all residents are, of about \$50.00 a month, and the rest of their compensation comes from their training.

At the larger hospitals, without teaching connections, you have a different set-up. The anesthetists are on a private basis, with the residents on salary by the hospital, in the same way that the resident surgeons are on a salary from the hospital.

In the hospitals of the smaller cities, of about three hundred beds, which includes the hospitals in Lewiston and Portland, the Director of Anesthesia would be on a private basis, with the Assistant Director, also, on a private basis. And here, if residents are necessary, and it seems at least one or more residents would be necessary in a hospital of this size, they would be on a salary from the hospital.

Now, all the service cases in these hospitals, in which the anesthetist is an independent practicing physician, are done without compensation, on the basis of the anesthetist being able to handle the service cases with his staff perfectly well, providing there

isn't a preponderance of service cases; in that case, it is conceivable that a hospital would have to compensate the anesthetists for excessive charity work.

DR. HILL: Do you think that perhaps the regular anesthetist might get the service cases and the private cases might go to the referring physician, under such a set-up?

DR. WIGGIN: That is possible, of course, if the surgical staffs do not agree to support the Anesthesia Department of the hospital one hundred per cent.

At the smaller community hospitals, that is, twenty-five up to one hundred beds, the member of the staff who becomes the Director of Anesthesia is on a private basis, as well as his assistants, and here again, they should be able to handle all service cases, without compensation.

DR. CLUTE: Who pays for the ether and the gas and the gas-oxygen machines in these smaller hospitals?

DR. WIGGIN: That is an item which has always troubled the hospital administrators. The experience of at least a dozen hospitals around Boston during the last five years, which have developed Departments of Anesthesia, has been to handle these items by adding a suitable amount to the operating room fee to cover the cost of anesthetic drugs, supplies and apparatus. Where previously, one hospital that I have in mind, depended upon the profits from medical student, house officer anesthesia to cover the cost of anesthesia supplies, drugs and agents and equipment, as soon as the Anesthesia Department was established, by increasing the operating room fee these items were covered the same as the costs of surgical supplies.

The operating room fee for minor surgical cases was \$7.50; for ward cases was \$10.00 and semi-private room cases was \$12.00, while the private cases were charged an operating room fee of \$15.00. These were raised to \$8.50, \$12.00, \$15.00 and \$18.00 respectively, and it was found that in the course of the year, that they more than covered the cost of anesthesia supplies and equipment, without one complaint from any patient.

DR. CLUTE: Of course, it always worries me about how far you can stretch this patient's dollar that we hear so much about.

That's the hard part of this situation, isn't it?

DR. WIGGIN: As anesthesia is an adjunct to surgery; and the patient is willing to pay for surgical supplies in his operating room fee, it seems reasonable that he should be willing to pay for anesthetic supplies. If the small addition is added to the operating room fee the patient never questions it. That has been our experience in the past five years.

DR. HILL: Well, now, I am wondering if the panel is all in accord? I haven't had any questions come up from the floor in writing, as suggested previously. Does anyone wish to bring up any questions, verbally, before we have the discussion summarized?

You will have to speak up promptly if you have anything to offer.

DR. WIGGIN: I might add that I hope Dr. Flagg, in his summation, will tell what he feels about the situation of anesthesia in this State.

DR. HILL: He will tell us, I know. First, are there any questions?

DR. KAGAN: Dr. Clute has brought up a point that is rather vital to the profession, the question of economics. We are hearing a good deal tonight about the increased cost to the patient, whereas the big cry all over the country is about reducing the cost.

I think it will be interesting to have something said along that line.

DR. BUTLER: I would like to ask the panel-at-large what the place of the nurse-anesthetist is going to be in the present scheme of things.

DR. HILL: Dr. Flagg will answer that question in his summary. Are there any other questions?

Well, now, you people have all been to musical shows; you have seen the chorus come in and dance and sing for you, and all of that really provides an entrance for the prima donna, who wears a red necktie to-night. [Laughter and applause.]

It is a great pleasure to have Dr. Flagg as the "Voice of Experience" to summarize this discussion. After that, I am sure he will take up the subject of resuscitation and the use of gases in the clinical treatment of disease. Dr. Flagg!

## Summary

By Paluel J. Flagg, M. D.,  
New York City

DR. FLAGG: Mr. Chairman, Ladies and Gentlemen.

I am sure that we are all agreed that the previous speakers have presented a first-class bird's-eye view of the problem of anesthesia. The discussion has been so complete that it is difficult to add to what has been said. The development of the sequence has been natural with little or no repetition; important points have been strongly stressed.

Before passing, however, to a somewhat broader view of the subject may I emphasize a number of the points which have been brought out.

I do not think it is possible to lay too much emphasis upon the necessity of abdominal relaxation, particularly as this applies to upper abdominal conditions. It is a mistake to attempt to carry a light anesthetic in the course of an intra-abdominal manipulation involving the parietal peritoneum. At the time of the closure of the abdominal wound the belly wall should be so relaxed that it can be lifted up and if necessary closed with an everting peritoneal stitch.

There are several ways of increasing the relaxation resulting from the anesthetic agent. One of the most practical means is by a recognition of suitable table positions. The patient must be correctly placed; his position must not induce abdominal tension. For example, during abdominal closure the abdomen should be flexed by raising the feet and the shoulders of the patient. It is bad technic to attempt to secure relaxation by deepening the anesthetic if this may be brought about by a change of position.

Another point has not been stressed. I think this is particularly important when there is a sequence of cases. I think we should recognize the danger of speed. The schedule should not permit the crowding of one case after another for the sake of convenience or as the result of a set routine. Morbidity and mortality follow this practice. When operating in a small or in a large insti-



tution in a sequence of operative cases the patient under operation should be considered the only patient in the world.

The question of suction cannot be over-emphasized. Suction should be available wherever there are unconscious patients. Incomplete anesthesia is frequently accompanied by vomiting. Profound anesthesia is sometimes accompanied by regurgitation. In either case the danger of aspiration arises. Suction should be available not only in the operating room but in the ambulance as well. Present day ambulances are merely compact, glorified hotel bedrooms. They fail to provide facilities for the needs of the unconscious patient.

You may say that it is quite a problem to provide suction in an ambulance. Fortunately this is not the case. A suction bottle can easily be connected with the windshield wiper, providing perfect results. The intake manifold of the engine provides a suction so powerful that when connected with a garden hose a hundred feet long, stoppered with a couple of corks and glass connections, it will empty a milk bottle in ten seconds. This suction can be used wherever a car can be parked. If suction is desired in an improvised operating room in a private home the hose may be connected up, dropped out of the window and connected to the nearby car.

By no means do I believe that spinal anesthesia should be completely eliminated from all operating rooms. Spinal anesthesia gives a perfect abdominal field. There is nothing so satisfying for the surgeon. In fact, this may become a liability if the surgeon depends entirely upon this type of anesthesia. It is fairly well recognized, however, that safe and successful spinal anesthesia requires a trained personnel, close supervision and a perfected routine if the morbidity and mortality is to be reasonably low. It certainly should not be employed by the surgeon who does an occasional operation without routine professional assistance and supervision. It may be noted in passing, however, that where a general anesthetic for abdominal surgery is difficult to obtain or where this is likely to prove inefficient, as on shipboard, in industrial emergencies and elsewhere, the danger faced from the general anesthetic is greater than that

from the spinal. In these fields spinal anesthesia becomes part of the surgical technic and is dependent upon the skill of the operator.

Let us consider this discussion as a long-ranged project. The recommendations of this evening will not go into effect next week or two months from now. They may occur, if you are fortunate, in a few years. Let us consider, therefore, the fundamental principles that must guide you no matter what technic you follow, no matter what organization scheme is developed. If you stick closely to three fundamental requirements in your anesthetic service you cannot go far wrong. These three requirements are: 1. Safety, 2. Efficiency, 3. Comfort, in the order stated.

In these days we are selling comfort. We have been selling comfort during the last four or five years. We are selling comfort in obstetrics and in surgery through the basal anesthetic approach. I say that we are selling comfort, we are being obliged to provide it by the patient. One has to put up a strong resistance to deny a patient induction in bed or to deny her an unconscious labor. Resistance against comfort must frequently be developed in order to increase safety. Efficiency in spinal anesthesia, for example, is one hundred per cent. Comfort is by no means always present and safety is reduced even under carefully supervised conditions.

It should be realized that while almost any anesthetic agent may be developed to a high degree of efficiency and safety within a given environment where conditions are fairly stable as to operating surgeons, anesthetists, nursing staff and volume of work carried out, this same agent or technic transplanted to a different environment may promptly develop a high degree of morbidity and mortality.

Improvements in anesthesia take place by the addition of new anesthetic agents and in new technics developed for old agents.

The choice of a new anesthetic agent is difficult, critical and an involved problem which should be approached with a great deal of preliminary consideration and close supervision. It must be realized that if we found the best possible anesthetic agent tomorrow it would very likely take twenty years to prove it. The accumulation of statistics requires

time, not only as to number of cases but more especially as to the variety of environments which cannot be changed and which must be reckoned with.

On the other hand, a new technic for administering an old agent is a relatively simple matter. Here the problem is mechanical rather than bio-chemical. Such an improvement involves much less risk. I wish to emphasize the difference between these two types of progress as the issue is not made clear by enthusiastic detail men.

Anesthesia in obstetrics is important. It presents complications which are habitually overlooked. From a purely mechanical viewpoint, if the ordinary surgical case were complicated by the presence of a tumor occupying the space which the full term uterus does, one would immediately recognize the presence of a real hazard. Yet, in ordinary obstetrical anesthesia the presence of the huge abdominal tumor, compressing the intestines against the diaphragm, frequently causing the contents of the stomach to regurgitate into the pharynx, is entirely overlooked.

Another point of even greater importance is what we might call the buffer effect of the fetal circulation. Accidents reported in obstetrical anesthesia which are not included in aspiration of regurgitated gastric contents during induction usually take place shortly after the delivery of the child and the placenta. In other words, after the elimination of a very considerable part of the total gas absorbing circulation. In other words, if the anesthetist, misled by the difficulty of induction, complicated by shallow respiration from pressure and increased blood volume through fetal circulation, attempts to carry a deep anesthesia, the patient may suddenly die from over-saturation of the anesthetic.

In this connection is to be considered the important problem of neonatal deaths from asphyxia neonatorum. This question will be developed as we consider the problem from a somewhat broader angle.

The question of the nurse anesthetist has been raised. This is a natural and a proper question. The nurse anesthetist has done excellent work. The results can be judged from the facts of record. The successful results referred to are to be found in a number of

large teaching institutions who have employed this type of technical work consistently. It must be emphasized that the satisfactory results obtained are limited to those of a technical character; they are also limited to the large well-supervised institution where such technical activity is thoroughly and consistently supervised by surgeons who have made the effort to acquaint themselves with the basic fundamentals of the professional aspects of the case. The success achieved in these groups cannot be used as a criterion to measure the results to be expected in small institutions where a large variety of operators practice, and where the nurse technician is required to assume professional as well as technical obligations. It is very much to be doubted if any nurse anesthetist has ever wished to assume the obligations of diagnosis and to prescribe pre-medication, emergency treatment and post-operative care. The experienced nurse realizes that this professional field is entirely outside of her qualifications and does not welcome the assumption of such a burden.

While the technical act of administering an anesthetic and the surgical supervision of this administration may provide a satisfactory routine, it does not take into consideration the exceptional case and the emergency which requires immediate action. These cases can only be safely met by the physician who is also a trained and skillful technician. A service in a large institution which does not possess competent physician anesthetists is static. Progress is hampered and while the recorded morbidity and mortality remains apparently within reasonable limits because of safe routine in the bulk of the work and the small number of exceptional cases, the end result always bears improvement through the presence of the physician trained in anesthesia.

The small institution and the attending surgeon of the small institution presents an outstanding characteristic, that is, individualism. Individualism must be highly developed in the man who is on his own, who must meet difficulties without assistance. Admirable in private practice, such individualism becomes a hazard when a surgeon attempts to make



himself the criterion of new agents and new technics.

I believe, therefore, that one of the most important reasons why an organized Department of Anesthesia is necessary, particularly in the small hospital, is that it provides a stabilizing influence counteracting this individualism. It provides someone who is familiar with the subject, someone who can be freely consulted, someone who will set a safe routine for the average case and who knows when exceptions should be made.

Let us now consider briefly the developments which may be expected to occur once your Department of Anesthesia is organized and functioning.

In 1929, just ten years ago, I attended a meeting of the American College of Surgeons in Boston. Dr. Yandell Henderson, addressing a group of anesthetists who were holding a meeting at the time, said to them, "You men are not only anesthetists, you are more than anesthetists, you are gas therapists." That idea caught; I haven't been able to let go of it. As a consequence of this infirmity (some might choose to call it such) at the closing of this panel, which will now take place, I shall discuss the evolution which may be expected of the Department of Anesthesia which you are to establish in your hospital. [Applause.]

DR. HILL: I want to thank the members of the panel who have so ably presented the situation.

After we have set the scenery for the second act and after Dr. Flagg has changed his costume we will proceed with the second part of this presentation on the subject of Resuscitation and Pneumatology.

DR. FLAGG: It was noted a few moments ago that anesthesia may be expected to cover a larger field than "the use of gases for the control of pain." We say, the use of gases for the control of pain, as describing the field of anesthesia, since at least eighty per cent of all anesthesia for major surgery is brought about by the employment of gases used either continuously or in a supplementary form during one or more stages of the operative procedure. In certain clinics where local and regional methods are highly developed this proportion will be reduced; over the country

as a whole, the percentage will be sustained. It may be noted in passing that the liquid anesthetics, ether, chloroform, ethyl-chloride, etc., are inhaled in gaseous form.

Instead of expecting the tail to wag the dog, which occurs when anesthesia or anesthesiology as a specialty accepts any activity that may be of interest, including those involving fields much larger than itself, let us review the historical background of the situation as we find this recorded in medical history. Let us see just what has happened and how we have arrived at our present viewpoint.

Exactly one hundred and fifty years ago Sir Thomas Beddoes of Clifton, near Bristol, England, opened his Pneumatic Institute. Gases were here employed for the treatment of clinical diseases. Physicians referred to as Pneumatologists employing gases for therapeutic purposes, practiced their profession until the early forties. At this time Long, Morton, Jackson and Wells introduced nitrous oxide and ether for the control of pain. The new therapy was so dramatic that Oliver Wendell Holmes was constrained to suggest a new name for the practice which he called Anesthesia. Overnight, as it were, the Pneumatologist became an Anesthetist with a field automatically restricted to the control of pain, occurring in surgical manipulations. This restriction has recently been emphasized in literature coming from Italy covering Dogliotti's new book on anesthesia which refers to anesthesia as "a surgical specialty."

The terminology anesthesia hampered the development of the use of gases for the treatment of clinical disease and delayed for more than half a century the use of gases for the saving of life.

Why not recognize these historical facts? Why not recognize the terminology in use in the leading medical dictionaries and which, I may say, has been adopted by the majority of English dictionaries now going to print. Why not use Pneumatology as a terminology describing the use of gases for the control of pain, the saving of life, and the treatment of clinical disease?

The anesthetist is familiar with the behavior of gases and their use. He is familiar with the care of the unconscious patient. He

recognizes the same phenomena when faced with unconsciousness from asphyxiation occurring from its many causes. He is prepared to deal with many conditions which are now neglected. Why hamper his work by a terminology which restricts his activities? I would suggest that you keep this integration before you. It is a development to be achieved by your Department of Anesthesia. It cares for a field as wide as the hospital service itself and reaches out to improve problems of public health.

Let me show you what has come out of Pneumatology as a specialty. Eight years ago a society was started for the purpose of preventing asphyxial death. The aims and purposes of this society are important enough to have enlisted the Surgeon Generals of the U. S. Army, Navy, and Public Health Service throughout this period. It has received the support of Generals Rossiter and McIntire of the Navy, of Generals Cummings and Parran of the U. S. Public Health Service, and of Generals Patterson, Reynolds and Magee of the Army.

In addition to these national leaders its Advisory Board has included distinguished men in the university and professional fields, such as Chevalier Jackson, Philadelphia, Yandell Henderson of Yale, Alexis Carrel of the Rockefeller Institute, Professor Weidlein of the Mellon Institute, and others.

Why are these national leaders interested? They are interested because Pneumatology includes basic world problems of gases in warfare, of gases in submarine operation, of air conditioning of high altitude planes, of the prevention of death from asphyxia due to many other causes.

Not long ago a submarine accident occurred outside of Portsmouth, N. H. You all know about it. That morning a wire was sent to the Surgeon General of the Navy suggesting the desirability of endotracheal facilities for rescue work on the "Squalus." Coöperation was accepted and equipment was forwarded to be placed on board the *S. S. Falcon*. The equipment loaned for this emergency is on the table before you. It was designed to meet the indications for treatment from asphyxia in its various stages. It will be a pleasure to demonstrate this equipment

to you after the meeting when you may examine it in detail.

Let me indicate to you another point of great interest which has developed from this specialty. The Professor of Obstetrics of every medical school of the United States and Canada was contacted in a personal communication. Responses were received from sixty-three universities. More than eighty per cent of all the universities in the U. S. and Canada. These responses have been summarized in the form of a report which I now turn over to Dr. Hill for publication in your *MAINE MEDICAL JOURNAL*.\*

Lastly, you may be interested to learn that it was through the field of Gas Therapy or Pneumatology that the Lindbergh Artificial Heart for the culture of organs came about.

From these references you can see the importance and the significance of the field of Pneumatology, the evolution of the Department of Anesthesia which you are to establish.

Should you be interested to observe the physical set-up of such a department you will find it occupying a space of a thousand square feet in Field Station No. 3 of the Medical Department of the New York World's Fair. You are all invited to call.

I will now show you a motion picture of a Department of Pneumatology in action, including the department at the World's Fair referred to. As you travel with me over the ground, let me point out in passing the State of Maine Exhibit, for which your State is responsible. This exhibit was a leading attraction and as you will note a long line approaches the entrance—the only State exhibit with a waiting line. You will note also the greetings extended to you by the Director of the State of Maine Exhibit, Mr. Charles Titus. I would also call your attention to the electrical transcriptions which have been prepared for medical teaching purposes, which are set up for you in the lobby. These transcriptions cover the Prone Pressure Schaeffer technic, the use of gases for the control of pain, the negative pressure cabinet, etc. They

\* This article appears in *THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION*, Volume 31, Number 1, Page 1.



are to be left here for your use through the concluding days of your meeting.

I thank you for your attention. [Applause.]

DR. HILL: Before turning the meeting back to Dr. Pratt, I want to thank Dr. Clute for bringing us the viewpoint of the surgeon, Dr. Eades for bringing us the viewpoint of the obstetrician, and I want to thank our pneumatologists, Dr. Clapperton, Dr. Wiggin and Dr. Flagg, for their wonderful messages that they have given to us tonight. [Applause.]

PRESIDENT PRATT: I don't believe there is much more that I can add to what has already been said.

I should like to remind those who haven't registered that we should like to have them register as soon as possible.

I hope that we will have as good a day tomorrow as we have had today.

This panel discussion is now adjourned.

[Whereupon, the meeting was adjourned at ten-fifteen o'clock in the evening.]

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## *Automobile Insurance Based on Injury Only*

The following interesting comment comes from the December, 1939, issue of the *Journal of the Connecticut State Medical Society*. Obviously such a radical type of automobile insurance coverage, if written in sufficient numbers, will materially lessen the load on hospitals and physicians now forced to treat many of these cases with little or no remuneration.

"A new and revolutionary type of automobile insurance coverage—which will help lift the burden of taking care of automobile accident victims from the medical profession and the hospitals if it is favorably received by the insuring public—has been announced by the American Mutual Alliance in a recommendation to the major mutual automobile insurance companies which comprise a section of its membership. Under the new coverage the medical, surgical, ambulance, hospital and professional nursing services of persons injured in automobile accidents will be paid

regardless of whether the insured driver is responsible for the accident.

Expected to be among the practical results of the new coverage are:

Adequate medical care will be provided for many injured persons, particularly pedestrians, who must depend upon their own or public resources, or upon the charity of doctors and hospitals.

Passengers in insured automobiles, now barred under so-called "guest laws" in many states from recovering money from a motorist unless he can be proved guilty of gross negligence, will be given an opportunity to secure medical expenses.

The payment of medical expenses irrespective of negligence should result in a considerable decrease in automobile insurance litigation; payment of medical expenses being automatic there will be no necessity to file suit to collect them by attempting to prove legal liability."

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The treatment of pulmonary tuberculosis demands little knowledge of drugs but much about the immediate and prolonged education of patients.—BROWN, LAWROSAN, *Tuberculosis Theses*.

The ability of lymphoma to cause massive bleeding, hemoptysis, hematemesis or bleeding by rectum also must be appreciated.—J. H. MEANS, M. D., *Jour. A. M. A.*, August 19, 1939.

## *Skin Testing for Undulant Fever in Maine\**

### RESULTS OBTAINED IN FIVE HUNDRED UNSELECTED HOSPITAL PATIENTS

By E. R. BLAISDELL, M. D., F. A. C. P., Portland, Maine

Undulant fever, although not a new disease in this country, is considered by some writers to be on the increase. Before this is accepted as a fact, it would seem necessary to have more reliable data which can be obtained only by examination from time to time of fairly large numbers of individuals.

An accurate diagnosis of *Brucella* infection in man is not without difficulty. Prior to the work of Huddleson, Johnson, and Hamann<sup>1</sup>, in 1935, a negative agglutination test and negative blood culture were considered sufficient evidence to rule out the presence of Brucellosis. Satisfactorily positive agglutination reactions or positive blood cultures are sufficient evidence for a diagnosis of this infection, but such tests when negative do not rule out its presence.

The allergenic skin reaction is now generally accepted as being a reliable test to determine whether the individual has ever been infected with *Brucella*. Unfortunately, it does not give us the information as to whether or not active infection is present.

Huddleson and his co-workers, following a study of the combined use in diagnosis of the opsonocytophagic activity of the blood and the allergic skin reaction, stated that a low degree of phagocytosis with a positive skin reaction meant infection with *Brucella*, while a high degree of phagocytosis with a positive skin reaction meant immunity. They also stated that individuals having a negative skin reaction and a low phagocytosis should be classified as susceptible to the infection. My own experience with this test is too small to enable me to discuss its relative value. From personal experience, a positive skin reaction with negative blood cultures and negative agglutination without clinical symptoms means only that the patient has at some time been infected with *Brucella*.

Groups of individuals, especially children, have been skin tested for Brucellosis in this country. Angle<sup>2</sup> and associates found 9.0 per cent of reactors in 7,122 school children in

Kansas. It occurred to me that it would be interesting to determine the percentage of positive reactors among a group of people in Maine. For this purpose, five hundred unselected service patients in the Maine General Hospital were chosen. The majority had lived always in Maine and the average age was approximately forty years. With one exception, none were suspected at the time of the skin test of having active undulant fever. Since active infection was suspected only in one instance, these tests were carried out with the idea of determining, if possible, the presence of past infection.

The material used was obtained from Dr. F. Forest Huddleson at the Michigan State College. This solution is a 1:1000 dilution and contains a soluble nucleo protein fraction of the three different species of *Brucella*; namely, *Brucella Melitensis*, *Brucella Abortus*, and *Brucella Suis*.

The test was made by injecting intradermally 0.1 cc. of the 1:1000 dilution. A positive reaction is not unlike that of a positive tuberculin reaction. Readings were made according to the method of Huddleson forty-eight hours after injection. Erythema without edema was not considered significant. Severe local and general reactions may occur in highly sensitive individuals. Such reactions were observed only once in the present series.

There were seventeen reactors among the five hundred patients skin tested. In no instance was the agglutination test positive for undulant fever. With the exception of one patient who was born in England where she spent her childhood, all were natives of Maine. One man, aged 59, had always consumed from one to three quarts of unpasteurized milk daily. The remainder could not be classified as milk drinkers. W. S., aged 39, had worked for four years on a cattle ranch in the middle west.

Only one positive reactor had clinical symptoms suggesting Brucellosis. His clini-

\* From the Medical Service, Maine General Hospital.



cal course is given in detail in order to point out the difficulties in diagnosis that may arise in the presence of a positive skin reaction. This patient, a male, a railroad brakeman, aged 36, was in the hospital one month before death. Three weeks prior to admission he was seized with upper abdominal pain and vomiting. The temperature rose to 103° and the pulse to 120 per minute. Work was resumed after three days in bed. Three days later, a severe chill occurred and the patient remained at home in bed. Since then, the temperature was said to have been "up and down," ranging from 98° to 103°. Alternating chills and sweats occurred once or twice daily. The skin test was reported markedly positive to Brucellergin before admission. There was no history of having ingested infected foods.

On admission to the hospital, the white blood count was 11,000 with 80 percent polymorphonuclears. Physical examination revealed no cause for the septic temperature. The chest and heart were apparently negative. There was slight rigidity in the right upper quadrant, but there were no points of definite tenderness and neither the liver nor spleen could be felt. Jaundice was absent. The Brucellergin skin test was repeated and gave a four plus reaction. All blood agglutination tests were negative as were frequent urine and stool examinations. The opsonocytophagic test showed 26 cells which was interpreted as an immune reaction. However, this finding was thought to be of very little clinical value at this time due to the fact that just previously two positive skin tests had been produced at an interval of about three weeks. After ten days of observation, the admission diagnosis of undulant fever was questioned and multiple liver abscesses of unknown origin were suspected. A surgical consultant was in agreement with this suspicion. The white blood count was 26,000. Drenching sweats and wide temperature fluctuations, ranging from 98° to 106°, continued. In spite of intensive supportive treatment with frequent blood transfusions, high fluid intake, etc., death occurred from exhaustion one month after admission.

Post-mortem examination showed a retrocecal abscess, portal phlebitis and multiple

abscesses of the liver. The appendix showed no evidence of present or past disease. The cecum and liver were normal in appearance and there was no apparent direct connection between the retrocecal abscess and the intestine. Macroscopically, the abscess area simulated a large broken-down lymphatic gland. This could not be confirmed by a later histological examination. Cultures from the various abscesses showed only staphylococcus aureus.

It might be stated in this connection that in undulant fever, serious complications, although rare, may occur. Meningitis, multiple abscesses, including breast suppuration, spondylitis, sub-acute bacterial endocarditis, pneumonia, abortion, orchitis and epididymitis have all been reported during the course of Brucellosis. However, in a discussion of the case just presented, it was the consensus of opinion of the medical, surgical, and pathological departments that the clinical and post mortem findings were insufficient to warrant the original diagnosis of undulant fever and that the cause of the infection which apparently began in the retrocecal area was still undetermined.

#### SUMMARY

Five hundred unselected patients were skin tested with Brucellergin. Positive reactions were found in 3.4 percent.

The sole purpose of this study was to determine, in so far as possible, the state of allergy resulting from *Brucella* infection in a group of Maine residents.

No attempt was made to evaluate the intradermal Brucellergin skin test as a diagnostic procedure in acute Brucellosis.

It seems reasonable to conclude that a Brucellergin skin test is a reliable method to determine the presence of *Brucella* allergy, but to state that this test when positive is indicative of acute undulant fever, in the absence of positive blood agglutination and suggestive clinical and physical findings, would lay one open to just criticism.

<sup>1</sup> Huddleson, I. F.; Johnson, H. W.; and Hamann, E. E.: A Study of the Opsono-Cytophagic Power of the Blood and Allergic Skin Reaction in *Brucella* Infection and Immunity in Man, *Am. J. Pub. Health*, 23:917-929, Sept., 1933.

<sup>2</sup> F. E. Angle, M. D.; W. H. Algie, M. D.; L. Baumgartner, M. D., Ph. D.; W. F. Lunsford: Skin Testing for Brucellosis in School Children, *Annals Int. Med.*, Vol. 12 (O. S., Vol. 13), Oct., 1938.

## *The President's Page*

The Wagner Health Act was apparently too expensive, for even the New Dealers, to push during an election year, so it has been shelved temporarily, but the Inter-Departmental Committee has been instructed to continue its work and its personnel is unchanged.

A new Wagner bill has been introduced appropriating ten million dollars to implement the President's plan of building small rural hospitals, as a start on the National Health Program.

This is to be expended by the Surgeon General of the Public Health Service, with the approval of the Social Security Administrator.

Provision is made for an Advisory Council of persons expert in hospital affairs to be appointed by the Surgeon General.

This Council is to review applications, considering the need of a hospital in any particular locality, and the prospect of proper maintenance and proper professional standards.

Senator Mead has also introduced a bill appropriating not to exceed one hundred million dollars, to be expended by the Administrator of the Federal Works Agency, in the form of loans to public bodies or non-profit organizations, for hospital purposes, which are defined to include such things as health centers and related facilities.

These proposals are a great comedown from the grandiose Wagner Health Act, and we can be fairly well assured that the Medical Profession will not be regimented unless and until the New Dealers are successful in the next election.

A few comments on these new bills may be in order.

No indications are seen of any consultation of the A. M. A., or any reference to the first plank in its platform, providing for the consolidation of all Federal health activities excepting those of the Army and Navy, into one department.

Final control of all institutions under both these bills remains with the Federal Departments.

There is approval of the principle that existing institutions, both public and private, be fully utilized before new ones are built.

It would seem safe to prophesy that we shall never be free from proposals for half-baked legislation in medical matters until the New Dealers are removed from control in Washington.

GEORGE L. PRATT, M. D.,  
*President, Maine Medical Association.*



## Editorial

### *Cancer Control Education*

There is no doubt that every far-seeing physician is strongly in favor of intensive education of both the laity and the physician regarding the cancer problem. Education of these two groups is, however, a separate problem. Let us look at them with utter frankness.

We have reached a commendable stage in the treatment of cancer, where surgical procedures, at times reënforced by radium or X-ray, can practically assure the patient of a five year (and many times a complete) cure in an increasingly large percentage of cases PROVIDED the disease is discovered and treated early. Accumulating statistics all over the world show that it is the factor of DELAY that is at present the greatest hinderance to cure. It is delay that we must educate against. Delay that we must fight in every way possible. Neither diagnostic skill nor improved surgical technic can avail against delay in seeking advice or in accepting immediate operation when advised. Early diagnosis and early operation spell probable success in a large percentage of cases, while late diagnosis—delay—and late operation spell defeat in the large majority of cases coming to the surgeon.

A vivid example of delay caused by ignorance is the following. One year ago a woman of 48 showed a "lump" in her breast to her husband who advised NOT consulting a physician because the lump was not painful. When the patient at last disregarded her husband's advice and sought help she was in an advanced stage of carcinoma and inoperable.

One of the most pointed and sane articles ever published on this subject appeared in the October, 1939, number of the *Readers Digest*; an abstract of an article in *Hygeia* by Dr. R. S. Ferguson. We strongly recommend it to all physicians. Marked copies could well be placed in every physician's waiting room for patients to read.

This article contains the strongest possible arguments for the putting aside of old superstitions, the elimination of foolish and often

suicidal fear from the patient's attitude toward disease, and a strong plea to the layman to use all his intelligence and to give his physician every chance to be of real help to him. The burden of responsibility for incurable disease is not always upon the physician's shoulders, but lies, in many instances, in the heedlessness, ignorance or lack of coöperation on the part of the patient.

This article also demonstrates most vividly how great is the need for more thorough education of the public in knowledge, not only of cancer but about all other disease symptoms.

The other side of our problem has to do with the frankly acknowledged need for more thorough education of the physician. It is painfully evident that he needs education, in many instances, fully as much as the patient. This issue should not be dodged, and the effort to correct the fault should start at once within our own ranks, lest we soon find to our chagrin that the public is demanding a higher standard of intelligence on our part.

In our own state a commendable effort is being made to overcome this defect in our profession, as evidenced by the efforts of our state medical association to stimulate post-graduate education. Our county medical societies could well contribute their share by concentrating on just one single but simple effort, namely, that of MORE THOROUGH AND MORE COMPLETE PHYSICAL EXAMINATIONS of all patients. If the general practitioner could be convinced that what he needed was more knowledge of his patient from the simple point of view of complete physical examination, a far step would be accomplished in advancing medical practice in our state.

Only by a searching history taking and a COMPLETE physical examination can the physician hope to learn everything of value about the patient and be able to give him logical advice. The man who fails to make at least a digital rectal examination on all patients complaining of any degree of gastrointestinal trouble fails utterly in his duty.

For, cancer of the rectum is the easiest of all G. I. tract diseases to diagnose, once the patient has presented himself; yet fewer diseases are diagnosed so late. For this lamentable state of affairs the physician is largely responsible. Cancer of the rectum is now one of the most curable of cancers; if discovered and operated early. It is definitely the duty of every physician to make it so, in all cases, by doing ROUTINE rectal examinations as a matter of habit.

Cancer of the breast is at present probably the most poorly treated of all cancers, mainly because of disastrous advice given by the first physician seeing the case. Wait-and-see advice is nothing short of criminal. In all doubtful cases surgical consultation should be demanded.

The following story illustrates advice which no intelligent physician should be guilty of giving. A woman of 56 received eleven X-ray treatments to an unproven tu-

mor of the breast and was then told that she need never be concerned about it again. Four years later she consulted another physician for the same tumor. Attempts were made to remove this under local anesthesia. The specimen submitted to the pathologist showed a well-developed adenocarcinoma. Cut section of the breast after a delay of 12 days showed extensive involvement of the breast. The second physician failed tragically in his duty to the patient by attempting a local removal of the tumor without being prepared to do a radical mastectomy at the same sitting, after frozen section diagnosis by an attending pathologist.

How can we make progress in cancer control if ignorant patients get even more ignorant advice from their physicians? This is a question for every physician in the State to answer for himself. If you do not know—*read, study, consult*, but do not expose your patient to the tragedies of ignorance.

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Fundal carcinoma is typically a disease of post-menopausal age. The average age in this series was 57.1 years. Seventy-two per cent of the patients were between fifty and sixty-nine years of age.

Child bearing is not related to fundal carcinoma. Twenty-seven per cent of the women in this series had never been pregnant.

Spotty bleeding is the most common symptom. The average duration of symptoms is long, 22.7 months in the 104 cases reported. Symptoms of long duration often do not mean incurability.

There are no characteristic pelvic findings, but some enlargement of the uterus is usually present. When the uterus is only slightly enlarged and movable the prognosis is relatively good. Fibroids confuse the picture in about

one-fifth of the cases. The results are poor in this group.

Panhysterectomy, when possible, has been the favorite method of treatment, and seemingly has given the best results. With present methods it is possible to cure about one-half the patients presenting themselves with this disease.

It is possible to divide fundal carcinomas into several histologic groups based upon the degree of cellular differentiation and the general pattern. There are many sources of error in such divisions, however. Adenoma malignum forms seem definitely more benign than the others. Prognosis should not be based upon the single factor of the histologic type.—DANIEL G. MORTON, M. D., *Am. Jour. of Roentgenology and Radium Therapy*, May, 1939.

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Chronic dyspepsia in a man who has reached the age of 60 years is a symptom of very grave possibilities. Of the men of this age who came to the clinic because of indigestion, 39 per cent were found to have cancer.

In men of 70 years and older, cancer was actually demonstrable as the cause of their dyspepsia in 58 per cent of instances. —ANDREW B. RIVERS, M. D., *Jour. A. M. A.*, September 23, 1939.



## Necrologies

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### *Edward L. Pratt, M. D.,* *1884-1940*

Doctor Edward L. Pratt of Lewiston and Auburn, former prominent New York specialist, died after a brief illness on January 19, 1940. He was born at Cornwall, Canada, December 13, 1884, the son of Herbert L. and Abbie H. Pratt. He was a graduate of Phillips Andover Academy, Yale, and the College of Physicians and Surgeons of Columbia University, 1911. He interned at Harlem Hospital, New York, and practiced in New York until coming here in 1933. He had become well known in this and surrounding communities for his special work in the field of endoscopy as well as in the general field of ortho-laryngology. He was a man well liked and respected among the doctors and patients in spite of his few years' work in Lewiston and Auburn.

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### *Virgil Connor Totman, M. D.,* *1872-1940*

Doctor Virgil Connor Totman died suddenly at his home in Oakland, Maine, on January 6, 1940, at the age of 67 years. He was born in Fairfield, Maine, on December 9, 1872, the son of Herod V. and Carolyn Shepherd Totman. He graduated from Coburn Classical Institute and Colby College in the class of 1894. He received his M. A. degree from Colby in 1897 and graduated from Bowdoin Medical School in 1900. For three years he studied eye, ear, nose and throat in New York and for sixteen years was in charge of the nose and throat clinic in Waterville.

Before coming to Oakland, Maine, he practiced at Bar Mills from 1900 to 1906.

In 1903 he married Henrietta Tozier of Fairfield and to this marriage three children were born, two of whom, Virgil C. Totman, Jr., and Carolyn Totman, survive.

He was a member of numerous civic, fraternal and religious organizations.

Always ready when needed up to the day of his death, Doctor Totman will be missed by the community in which he practiced and by his medical confreres.

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### *Albert Ervin Kilgore, M. D.,* *1863-1940*

Doctor Albert Ervin Kilgore died at his home in Brooks, Maine, on January 7, 1940. He was born in Augusta, Maine, on June 6, 1863, the son of Luther and Vesta Rose Kilgore. Doctor Kilgore received his education at the Maine Central Institute in Pittsfield, Maine, and the University of Vermont College of Medicine, where he received an honorary diploma.

After graduation he went to Brooks, Maine, where he carried on his medical practice up to the time of his death. He married Miss Ellen Patterson of Belfast and has one daughter who survives him.

Doctor Kilgore practiced medicine for over 50 years and in 1938 at a meeting of the Maine Medical Association in Bar Harbor, he was awarded the 50-year service medal. He was also a member of the Waldo County and the American Medical Associations.

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### *Arthur A. Shaw, M. D.,* *1864-1939*

Doctor Arthur A. Shaw of Clinton, Maine, died at the home of his daughter, Mrs. Winnifred Terrill, in Concord, N. H., on December 15, 1939, where he had been staying for a few months because of his illness. Doctor Shaw was born in Etna, Maine, on April 7, 1864. He received his education at the Maine Central Institute at Pittsfield, and Bowdoin College, and graduated from Bowdoin Medical School in 1891. He practiced for a short time at Burnham and then went to Clinton, where he resided since. He had a large practice and was well known over a large section.

In 1894 Doctor Shaw married Miss Ethel Foster of Clinton, who survives him. To this union three children were born, two sons, Donald A. Shaw of Nashua, N. H., and Kenneth E. Shaw of Newport, N. H., and one daughter, Mrs. Winnifred Terrill of Concord, N. H.

He was a member of the Kennebec County, Maine Medical, and American Medical Associations.

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## County News and Notes

### 100% Paid-Up Membership for 1940

*Piscataquis County Medical Society*, N. H. Nickerson, M. D., Greenville, Secretary. (To Piscataquis County for the third successive year goes credit for being the first to send in 100% payment of dues.)

*Sagadahoc County Medical Society*, Jacob Smith, M. D., Bath, Secretary.

### New Members

#### Hancock

Ernest L. Coffin, M. D., Northeast Harbor, Maine.

#### Kennebec

Henry Almond, M. D., Gardiner, Maine.

#### Penobscot

Wilfred J. Comeau, M. D., Bangor, Maine.

Paul A. Millington, M. D., Newport, Maine.

#### Piscataquis

John B. Valentine, M. D., Dover-Foxcroft, Maine.

#### Sagadahoc

Willis B. Mitchell, M. D., Wiscasset, Maine.

### Removal Notices

George W. R. Bowie, M. D., (Franklin County)  
From New Gloucester, Maine  
to Vanceboro, Maine.

E. Allen McLean, M. D. (Cumberland County)  
From 201 State Street, Portland, Maine  
To 29 Deering Street, Portland, Maine.

### Androscoggin

The last regular meeting of the Androscoggin County Medical Society was held February 15, 1940, at the Auburn Y. M. C. A. The meeting was devoted entirely to the subject of medical publicity and the work of the National Physician's Committee with the discussion led by Doctor M. J. Harkins.

WEDGWOOD P. WEBBER, M. D.,  
Secretary.

### Cumberland

A meeting of the Cumberland County Medical Society was held Friday, February 16, 1940. Afternoon Clinic at 4.30 P. M. at the Maine General Hospital.

(1) Puerperal Sepsis, Alvin Ottum, M. D., Obstetric Service.

(2) Delayed Union Fracture of Leg Due to Lues, Thomas Martin, M. D., Orthopedic Service.

(3) Fractures of Jaw, Ralph Hutchinson, Dental Service.

(4) Cancer of Fundus Complicated by Ascites. Radium, William Holt, M. D., Director Radium Therapy.

(5) Injury to Larynx from Duodenal Tube for Continuous Drainage, George O. Cummings, M. D., Ear, Nose, Throat Service.

(6) Peripheral Emboli, I. M. Webber, M. D., Surgical Service.

(7) Pernicious Anæmia with Diabetes and Lues, E. R. Blaisdell, M. D.

(8) Localization of Stones Right Upper Quadrant, Jack Spencer, M. D., Radiologist.

Dinner at 7.00 P. M., at the Eastland Hotel, was followed by a Panel Discussion of Pneumonia, conducted by Frederick T. Hill, M. D., Waterville, Chairman; and T. E. Hardy, M. D., Waterville; S. A. Cobb, M. D., Sanford; Julius Gottlieb, M. D., Lewiston; E. H. Drake, M. D., Portland; E. R. Blaisdell, M. D., Portland; and L. T. Thaxter, M. D., Portland.

DONALD H. DANIELS, M. D.,  
Secretary.

### Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, February 6, 1940, at 8.15 P. M., with the President, Dr. Franklin Ferguson, presiding. There were 42 members and three guests present.

Dr. Milton S. Thompson was elected to membership. The resignation of Dr. C. F. Hogan, who has moved to Virginia, was accepted.

Dr. Leon Babalian gave a report on *Ringworm of the Scalp*.

The paper of the evening was by Dr. J. F. Wellington, who spoke on the subject, *Nephroptosis*. The paper was discussed by Dr. R. L. Huntress and Dr. E. E. O'Donnell.

Respectfully submitted,  
ALICE WHITTIER, Secretary.

### Hancock

At the annual meeting of the Hancock County Medical Society the following officers were elected:

President, Ralph W. Wakefield, M. D., Bar Harbor.

Vice-President, Philip L. Gray, M. D., Harborside.  
Secretary-Treasurer, M. A. Torrey, M. D., Ellsworth.

Delegate to the 1940 annual session of the Maine Medical Association, M. A. Torrey, M. D.

Alternate, R. E. Weymouth, M. D., Bar Harbor.

Censor, J. H. Crowe, M. D., Ellsworth.

M. A. TORREY, M. D.,  
Secretary.

### Have You Paid Your 1940 State and County Dues?

To insure being in the annual roster, which is to be printed in the May issue of the JOURNAL, members must be reported in good standing by their County's Secretary on or before April 1st.



### Kennebec

A meeting of the Kennebec County Medical Association was held at the Sisters' Hospital, Waterville, Maine, Thursday, February 15, 1940.

Clinical Session at 5 P. M., which was presided over by Blynn O. Goodrich, M. D., President:

- (1) Substernal Adenoma of the Thyroid, A. H. McQuillan, M. D.
- (2) Lymphadenopathy, L. A. Guite, M. D.
- (3) Sulfanilamide Therapy in Three Head Cases, T. C. McCoy, M. D.
- (4) Laryngeal Trauma Due to Indwelling Tube, F. T. Hill, M. D., and E. R. Irgens, M. D.
- (5) Carcinoma of Penis, E. W. Harlow, M. D.
- (6) A Case of Scurvy(?), Aaron Cook, M. D.

Dinner at 6.30 P. M., which was followed by a business meeting.

Minutes of the last meeting were read and approved.

Henry Almond, M. D., Gardiner, Maine, was elected to membership.

The applications of James E. Poulin, M. D., Waterville, Maine, and Samson Fisher, M. D., Oakland, Maine, were received and referred to the Board of Councilors.

Resolutions on the recent death of Virgil C. Tottman, M. D., of Oakland, Maine, were read by L. A. Guite, M. D., and resolutions on the recent death of Arthur A. Shaw, M. D., of Clinton, Maine, were read by Charles E. Towne, M. D. Resolved that copies of these resolutions be spread on the records of the Kennebec County Medical Association, and that a copy be sent to each of the bereaved families, respectively.

The address of the evening was given by Forrest C. Tyson, M. D., Superintendent of the Augusta State Hospital, whose subject was "Psychiatrists' Attitude Toward the Alcohol Problem." This paper was very interesting, ably presented and brought out much general discussion.

There were 38 members and guests present.

FREDERICK R. CARTER, M. D.,  
Secretary.

### Knox

The regular meeting of the Knox County Medical Society was held at Rockland, Maine, February 13, 1940, with the President, Howard L. Apollonio, presiding.

The program for the evening was the Panel Discussion on Pneumonia, a very interesting and instructive discourse on the various phases of pneumonia.

Many thanks and much praise should be given to the members of the Panel for the very clever arrangement for handling the discussion.

A. J. FULLER, M. D.,  
Secretary.

### Penobscot

The Penobscot County Medical Association held its monthly meeting on Tuesday, February 20, 1940. A buffet supper at 6.30 P. M. at the Eastern Maine General Hospital preceded the evening program.

Samuel H. Epstein, M. D., Visiting Neurologist, Boston City Hospital, was the speaker of the evening. His subject was *Epilepsy, with Newer Concepts of Therapy*.

FORREST B. AMES, M. D.,  
Secretary.

### Piscataquis

A meeting of the Piscataquis County Medical Association was held at the Mayo Memorial Hospital in Dover-Foxcroft, February 15.

John B. Valentine, M. D., of Dover-Foxcroft, was elected to membership.

A general discussion of pneumonia by the members of the association was held.

Eleven members were present.

N. H. NICKERSON, M. D.,  
Secretary.

### Sagadahoc

The January meeting of the Sagadahoc County Medical Society was held at the Hotel Sedgwick, Tuesday, January 16, 1940. Presiding at the meeting were the newly elected officers for 1940, who are as follows:

President, H. D. Grant, M. D., Bath.

Vice-President, F. A. Winchenbach, M. D., Bath.

Secretary-Treasurer, Jacob Smith, M. D., Bath.

Censors, M. Joss, M. D.; E. M. Fuller, Jr., M. D.; and H. F. Morin, M. D.

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Delegate to the 1940 annual session of the Maine Medical Association, A. F. Williams, M. D., Augusta.

Willis B. Mitchell, M. D., of Wiscasset, was elected to membership.

Guest speakers for the evening were Julius Gottlieb, M. D., and Charles W. Steele, M. D., of Lewiston, who presented an exceptionally interesting panel on Clinical Pathology with a round table discussion by our members.

JACOB SMITH, M. D.,  
*Secretary.*

## Coming Meetings

### County Medical Societies

Kennebec County Medical Association, Frederick R. Carter, M. D., Augusta, Secretary.

March 21, 1940—Gardiner General Hospital, Gardiner, Maine.

Speaker: E. R. Brow, M. D., Montreal, Canada.

Subject: Some Heart Emergencies.

April 18, 1940—Augusta General Hospital, Augusta, Maine.

Program to be announced later.

May 16, 1940—Veterans' Administration Facility, Togus, Maine.

Program to be announced later.

### State Medical Associations

Connecticut State Medical Society, Creighton Barker, M. D., 258 Church Street, New Haven, Secretary.

Annual Meeting—Hartford May 22-23, 1940.

Maine Medical Association, Frederick R. Carter, M. D., 22 Arsenal Street, Portland, Secretary.

Annual Meeting—Rangeley Lakes, June 23-25, 1940.

Massachusetts Medical Society, Alexander S. Begg, M. D., 8 The Fenway, Boston, Secretary.

Annual Meeting—Boston, May 21-22, 1940.

New Hampshire Medical Society, C. R. Metcalf, M. D., 5 S. State Street, Concord, Secretary.

Annual Meeting—Manchester, May 14-15, 1940.

Rhode Island Medical Society, Guy W. Wells, M. D., 124 Waterman Street, Providence, Secretary.

Annual Meeting—Providence, June 5-6, 1940.

### National Medical Societies

American Medical Association, Olin West, M. D., 535 North Dearborn Street, Chicago, Secretary.

Annual Meeting—New York, June 10-14, 1940.

American Association for the Study of Goiter, W. Blair Mosser, M. D., Kane, Pennsylvania, Corresponding Secretary.

Annual Meeting—Rochester, Minnesota, April 15-17, 1940.

## SILVER PICRATE

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**due to *Neisseria gonorrhoeae* • *Trichomonas vaginalis*  
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\*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1959.

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## Panel Discussions Available

The following panel discussions are available for County Medical Society programs. Application for these should be made to the Chairman well in advance, if possible, so that arrangements can be made for presentation.

*Pneumonia*, F. T. Hill, M. D., Waterville, Chairman.

*Cardio-Renal Diseases*, E. E. Holt, Jr., M. D., Portland, Chairman.

*Fractures*, Allan Woodcock, M. D., Bangor, Chairman.

*Acute Appendicitis*, F. H. Jackson, M. D., Houlton, Chairman.

*Clinico-Pathological Discussion*, Julius Gottlieb, M. D., Lewiston, Chairman.

*Thoracic Surgery*, George Young, M. D., Skowhegan, Chairman.

*Blood Dyscrasias*, L. H. Smith, M. D., Winterport, Chairman.

*Convulsions*, T. A. Foster, M. D., Portland, Chairman.

*Management of Brain Injuries*, Howard F. Hill, M. D., Waterville, Chairman.

## Notices

### Finnish Relief Fund

The Finnish Relief Fund, Inc., is sponsored by Mr. Herbert Hoover. It is approved by the Finnish Minister in Washington, D. C., His Excellency Hjalmar Procopé.

It has the main purpose of accepting for the Finnish people and transmitting to Finland any funds contributed for this great cause by the American people.

Contributions, unless specifically intended to be used for war material, will be used for food and clothing for the Finnish civilian population, many of whom are suddenly made homeless by having their houses irreparably demolished by the incendiary bombs from Russian aeroplanes.

Members of the American Medical Association are the only doctors who will be asked to contribute through this Fund.

It is hoped the profession will respond as generously as possible. It is further hoped that every doctor will make some contribution, and no matter how small it may be, it will be gratefully accepted. We believe the profession should have one hundred per cent of its members become contributors to this most worthy cause.

No money is deducted for expenses from any contribution made through this Fund, and every dollar donated arrives in Finland worth one hundred cents.

No salaries are paid and no financial remunerations are made to officers on duty with the Finnish Relief Fund. Expert auditors make a daily check-up of the donations acquired and chart the results.

The National Chairman of the Medical Division of the Professional Groups of the Finnish Relief Fund, Inc., is Dr. John Frederick Erdmann of New York.

A director (chairman) for the Medical Division has been or will be appointed from each state who

will try to get in touch with every member of the American Medical Association of that state by such method as he deems best.

The Executive Director of the Medical Division is Dr. Kerwin W. Kinard, who has offices at Fund Headquarters.

All checks should be made payable to the Finnish Relief Fund, Inc., and sent to the Medical Division of the Finnish Relief Fund, Inc., 420 Lexington Avenue, New York, N. Y.

### Tumor Clinics

- Bangor:** *Eastern Maine General Hospital*  
Thursday, 11.00 A. M.-12.00 M.  
Director, *Magnus F. Ridlon, M. D.*
- Lewiston:** *Central Maine General Hospital*  
Tuesday, 10.00 A. M.-12.00 M.  
Director, *E. V. Call, M. D.*
- St. Mary's General Hospital*  
Wednesday, 4.00 P. M.  
Director, *R. A. Beliveau, M. D.*
- Portland:** *Maine General Hospital*  
Thursday, 11.00 A. M.-12.00 M.  
Director, *Mortimer Warren, M. D.*
- Waterville:** *Sisters Hospital*  
1st & 3rd Thursdays, 10.00 A. M.  
Director, *B. O. Goodrich, M. D.*
- Thayer Hospital*  
2nd & 4th Thursdays, 10.00 A. M.  
Director, *E. H. Risley, M. D.*

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# The Journal of the Maine Medical Association

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## *Chronic Arthritis: Therapeutic Considerations*

By ROBERT T. PHILLIPS, M. D., Portland, Maine

Conservative treatment, in the light of our present knowledge, is the keynote of therapy for chronic arthritis. The value of supervised rest and exercise, the proper support and protection of involved joints, good hygiene, the employment of the more simple forms of physical medicine, and moderation in all things, has not been nullified by a host of modalities claimed to have specific effect upon the course of this disease.

As new methods are introduced it is, nevertheless, important that we consider what that is new may be of real value and, insofar as possible, apply it to the benefit of those individuals, two million of them in this country alone, who suffer from chronic arthritis. Until very recent years the attitude of the profession toward this problem has been characterized by negative thinking and a gross lack of interest.

I propose to present in this paper certain considerations relative to the treatment of this disease based upon considerable personal experience during the past nine years. It is, to my way of thinking, of prime importance that the general practitioner realize that there are indeed methods of treatment available now that can be effective in aiding the indi-

vidual with chronic arthritis to better health, no matter how severe that arthritis may be. To adopt a do-nothing policy is to turn many sufferers into the hands of irregular practitioners where, as a rule, treatment does more harm than good. I shall consider the treatment of chronic arthritis under the following categories:

1. Rest and Exercise.
2. Physical Therapy.
3. Orthopedic Aids.
4. Diet.
5. Drugs.
6. Psychotherapy.

1. **REST AND EXERCISE.** Rest is the one method of treatment which students of the disease unanimously believe to be of value. When a patient with painful joints is urged to keep going at all costs the result is invariably harmful. On the other hand, occupying a comfortable position in bed and gradually folding up may be equally bad. Rest should be combined with exercise. Every joint should be put through a complete range of motion at least twice every day.

Those patients confined to bed should practice hyperextension exercises after each meal



in the following manner. The first position is lying on the back, two pillows being used, one under the knees and one under the dorsal spine. No pillow is used under the head and the patient is instructed to raise the hands to the sides of the head in order to spread the ribs and raise the diaphragm. While in this position deep breathing exercises are done slowly for twenty minutes. The second position is accomplished face prone, the subject lying upon two pillows, one placed under the hips and a second from the hips to the clavicles. Here again no pillow is used for the head and the arms are placed above the shoulders, this position occupying another twenty minutes. These and other exercises have been described with illustrations elsewhere.<sup>1 2</sup>

Pemberton, who has always emphasized the necessity of restoring, insofar as possible, the patient's "physiological equilibrium", has this to say about rest in arthritis: "Systemic rest is acknowledged to be the most useful single basic factor in the treatment of arthritis. Use of "rest", however, is not to be interpreted as a generic panacea for patients with arthritis. It is brought forward rather as a comprehensive, though fragmentary, method of approaching that betterment of function, in many systems of the body, which makes toward a so-called reversal of the arthritic process."<sup>3</sup>

Graded exercises, particularly with a view to counteracting the tendency for the development of contractures are indicated at all times, within the limits of the patient's capabilities. Muscle setting exercises as well are readily done in bed and good muscle tone can be retained or developed even with prolonged bed rest.

2. **PHYSICAL THERAPY.** In general, the simpler forms of physical medicine are as effective, if not more so, than the more complicated measures, especially those concerned with electrical apparatus.<sup>4</sup> I have never felt that any form of electrical treatment had more than a transient influence on the patient's arthritis. The exception to this is in the case of gonorrheal arthritis where hyperthermia may act almost as a specific cure. Hot fomentations to the affected joints two or three times a day frequently offer satis-

factory relief except in the more acute phases of the disease when heat should be employed with caution.

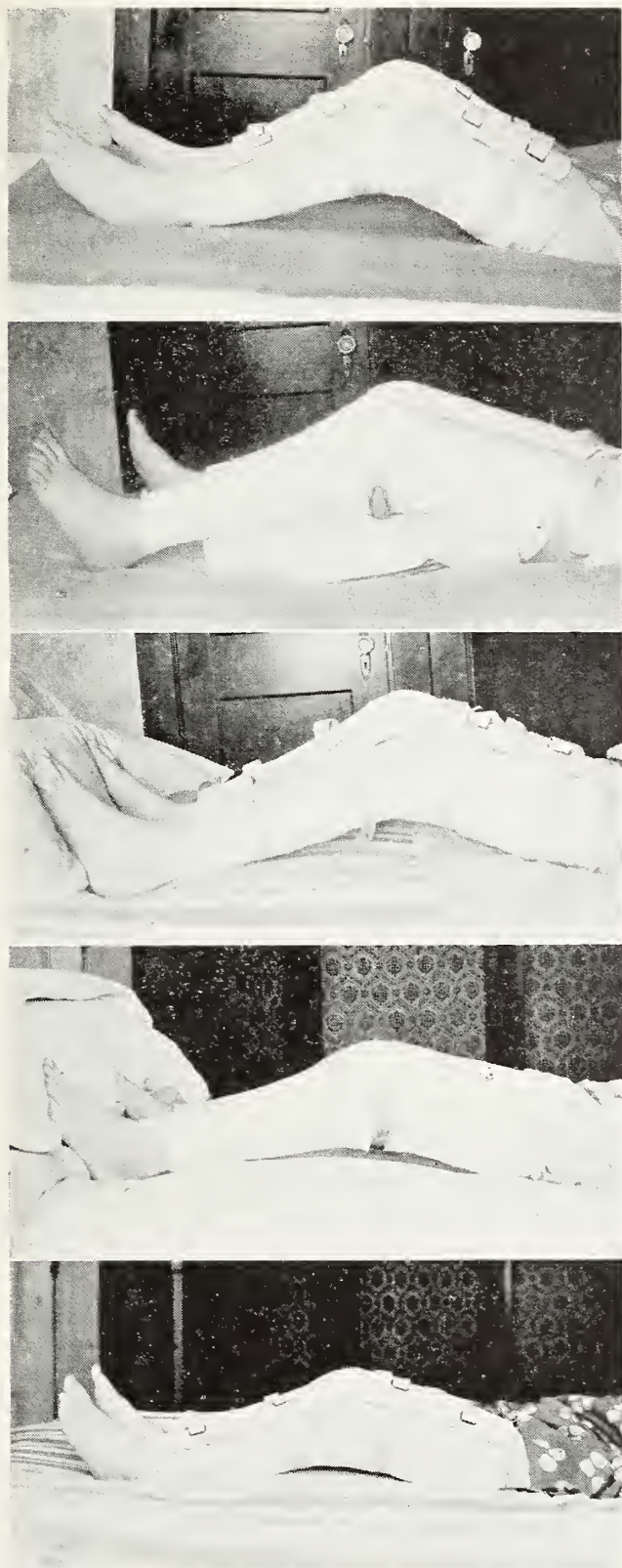
Melted paraffin may be used to advantage, particularly for the hands and fingers. The hands are dipped about six times until a glove is made. Since paraffin may be used at a temperature considerably higher than water, a marked vasodilation follows which brings an increased flow of blood to the small joints of the fingers. Hot magnesium sulphate foot baths are useful in controlling the swelling and edema of the ankles. Dry heat, in the form of an electric pad or the lowly hot water bottle is not to be overlooked. Underwater therapy is useful not only for its sedative effect but for muscle training exercises and for obtaining increased range of motion where contractures are present. The Hubbard tank is ideal for this purpose; one is now in use at the Children's Hospital.

Massage is of proven value. At all times it should be gentle as vigorous massage may readily aggravate an inflamed joint. The strokes should be in the direction of the venous flow, twenty to the minute, for a ten-minute period. Oil of wintergreen or Imadyl Uction may be used as a counter-irritant.

3. **ORTHOPEDIC AIDS.** A cardinal principle in the treatment of arthritis should be proper rest and protection to the affected joints. Many patients have developed severe contractures in bed solely because adequate protection to irritated joints was not afforded. Light plaster splints are a most effective means of accomplishing this protection. They can be used to greatest advantage for the hands, knees and feet. The tendency of the arthritic hand is to develop flexion deformity with ulnar deviation. This can ordinarily be successfully counteracted by the use of a light palmar splint extending from just below the elbow to the tips of the fingers. This is made with one roll of plaster laid over a thin felt strip, a hole being cut around the thumb. When dry the edges are trimmed with adhesive tape.

A noteworthy use of plaster is in the correction and prevention of deformities affecting the knees. In those cases where flexion deformities are already present it is possible to obtain normal or nearly normal extension





Miss Y: age 45, rheumatoid arthritis, 12 years duration. Has not walked for four years. Before shells were applied, there was a permanent flexion deformity of both knees of 75 degrees. The illustrations, from above downward, indicate the manner in which this deformity is being corrected. The second and fourth pictures illustrate the process of wedging. She is now wearing her ninth set of shells, and will soon be allowed up. She retains 90 degrees motion in both knees. The flexion deformity at present is 25 degrees, nine months after the first shells were applied.

by a series of bi-valved knee shells made about a month apart. The patient sleeps with the shells holding the knees in extension. As the spasm and inflammation subside in the irritated joint a gain in extension invariably takes place.

Wedging plaster shells are helpful in hastening extension in knee joints where considerable flexion deformity is present. The extension gained by wedging is held by the immediate application of a new set of bi-valved shells. The extremities should be removed from the shells at least twice a day for exercise and massage.

During the past fifteen years the orthopedic surgeon has been giving more attention to operative manoeuvres calculated to restore in some measure function to badly diseased arthritic joints. In the hands of experts favorable results are possible in perhaps fifty per cent of the cases. The most satisfactory operative work is achieved on the ankylosed elbow. A noteworthy recent advance in surgery of the arthritic hip is the vitallium mold operation devised by Smith-Petersen.<sup>5</sup>

4. **DIET.** A variety of dietary regimes have been advanced as having some beneficial influence on the course of chronic arthritis. I do not believe there is such a thing as a diet for arthritis, except as it seems reasonable to advise the patient to include in his dietary an ample supply of fresh fruits and vegetables and other vitamin containing foods. I am inclined to favor some restriction in carbohydrate intake although I know of no convincing proof that this type of food is not well tolerated by the arthritic. A low caloric diet, adequate in other particulars, for the purpose of weight reduction, is certainly effective in bringing some relief to patients suffering in the weight-bearing joints, especially the knees.<sup>6</sup>

5. **DRUGS.** Gold has provoked more interest in the treatment of arthritis in late years than any other drug. While no one drug seems to enjoy the favor of serious students of the disease for long, as time goes more authorities appear to recognize in gold a drug which does seem to have the faculty of altering the nature of the disease. Dr. M. H. Dawson of Columbia, long an able and



conservative student of arthritis, writes: "I can quite confidently state that it is the only single therapeutic measure which I have yet encountered which actually influences the course of the disease."<sup>7</sup> Key of St. Louis, another competent observer, writes: "We believe that treatment with gold salts is particularly applicable to early cases of proliferative arthritis and that by its use it may be possible to arrest the disease before severe and permanent crippling has developed."<sup>8</sup>

Gold was first used for the treatment of arthritis by Forestier in France. He has used it continuously since 1928. Other workers were slow to take it up because of its toxic reactions. British investigators<sup>9</sup> have reported favorably on the use of gold although there were seven deaths in a series of 900 cases. I reported the first study on gold therapy for arthritis in this country in 1936 and at that time stated that the toxicity of the drug was such that it was of doubtful value.<sup>10</sup> Subsequently I reduced the dosage and now believe that it may be used with safety if the various reactions to it are kept in mind. It should be discontinued at the first sign of toxicity. I am using Myochrysine (Merck & Co.), and have used this preparation since 1934. While possibly more toxic than other gold compounds it nevertheless seems to be the most effective. It is now obtainable in 10 and 25 milligram ampoules but prior to this year it could be had only in 50 and 100 milligram ampoules. I never use a dose larger than 25 milligrams.

Gold is administered intramuscularly, preferably in the gluteal region. I begin with the 10 milligram dose, using the 25 milligram ampoule thereafter if no reaction develops. I formerly employed 100 milligram doses but now believe this amount is too large. One course of treatment consists of 12 inoculations following which there is a month's vacation. A second or third course may be given. The sedimentation rate seems to be influenced in a very real way by gold therapy. It is the only drug which I am acquainted with that accomplishes this change.

We have been using gold in the arthritis clinic at the Children's Hospital for more than a year. There have been toxic reactions but most of them have been quite mild. One

patient developed an exfoliative dermatitis and was confined to his house for two months. Notwithstanding, after the reaction cleared he improved greatly and wanted more gold therapy. The most striking improvement was seen in a woman, aged 37, who was forced to use a wheel chair when she first visited the clinic. Her weight was 100 pounds. An early case, of five months' duration, there was already definite flexion deformity of both knee joints and she was confined to her room. Subsequent to the institution of gold therapy, within one month her symptoms began to regress and in seven months she had gained 20 pounds, recovered the full use of her joints and married!

Sulphur therapy can be dismissed briefly. A popular form of treatment with many physicians, it is probably of no value whatever as a therapeutic agent in arthritis. It has recently been shown by the Rackham Arthritis Research Unit at Ann Arbor, that there is "no biochemical or metabolic indication of need for, or benefit from, sulphur medication in the treatment of rheumatoid arthritis."<sup>11</sup>

My own experiences with various types of vaccine therapy have been uniformly disappointing. No agreement exists on the rationale or technique of vaccine therapy and this alone strongly suggests the uncertainty surrounding this type of treatment. After having administered vaccines to several hundred patients I have to report that I have never, to my own satisfaction, seen a single individual whom I felt was really helped by this sort of treatment.

6. **PSYCHOTHERAPY.** I would prefer to speak of this as "encouragement therapy". It is of the utmost importance in treating arthritis, especially those with advanced lesions, to give the patient hope and confidence in the future. It is not desirable or necessary to make loose promises nor, on the other hand, to close the avenue to future betterment with remarks on the inefficacy of any kind of treatment. I have used normal saline injections for several years with benefit to selected patients, especially those who show little objective evidence of arthritis. A well-rounded therapeutic program, however,

## *The Modern Prognosis and Therapy of Schizophrenia (Dementia Praecox) from the Standpoint of the General Practitioner*

By ANDRÉ A. WEIL, M. D., Augusta State Hospital, Augusta, Maine

In the United States about 1% of the whole population, nearly 1,300,000, are incapacitated at any one given time because of some form of mental illness or mental handicap. The cost for caring for the 1/2 million hospitalized patients alone amounts to more than \$166,000,000 annually. These patients occupy 47% of all hospital beds in the United States<sup>1</sup>. Noyes assumes that from 15 to 20% of the first admissions in our hospitals for mental diseases are cases of schizophrenia. But in reality, more than 60% of the population of State Hospitals are made up of schizophrenics, due to the chronic trend of the disease<sup>2</sup>. In other countries it is not much better. In Germany, for instance, among 270,000 mental patients, nearly 190,000 are schizophrenics<sup>3</sup>. Dementia Praecox affects, by no means, only the white race. For instance, among the mental cases in Java 77% are schizophrenics, and in the Transcaspian region more than 65% are schizophrenics<sup>4</sup>.

These few figures suffice to show the medical and economic problem of Dementia Praecox.

Unfortunately, it is assumed in unprofessional, and very often in professional circles, that the problem of schizophrenia is for the psychiatrist alone. This very wrong conception is probably the chief reason why so many questions regarding schizophrenia remained unanswered for such a long time. The general practitioner is many times the first to deal with the very early cases and sometimes with the so-called "latent" cases. On his correct diagnosis and prognosis may depend very much; for example, the quick application of a proper therapy. We shall see in the course of this paper that *quick* application of therapy, in many cases, may be of decisive importance in the outcome. On the physician's correct diagnosis—and also on his clearly seen prognosis—may depend also quite different things: the welfare of the patient's whole family and even the life and health of others in his environment.

The early symptoms of schizophrenia are

doubtlessly well known in this country to every general practitioner. The "latent" schizophrenic cases, it is true, are much more difficult to diagnose, and the general practitioner should not hesitate in all uncertain cases to submit the patient to a specialist.

First, a few words about the *prognosis* of schizophrenia. We have to note here briefly that the prognosis of untreated schizophrenic patients is made much more favorable in all cultured countries today than it was 30 years ago. We know today that a schizophrenic attack may take three different courses. Roughly speaking: 1. It may heal up more or less completely but may manifest itself after months or even years in a new attack;

2. The patient may recover after one single attack and stay recovered for his whole lifetime (ideal case of a spontaneous remission);

3. The process can take a chronic course from the beginning to its end. Obviously, it is interesting to the practitioner to know which cases have a tendency towards a spontaneous remission and how the numerical situation stands. The answer to such a question which can be based only on many statistics, seems at first difficult to find. It should be understood that schizophrenia does not mean a uniform disease, but rather a group of diseases. It should also be realized that the diagnosis of schizophrenia, especially regarding border cases, is not the same in all countries and that the meaning of the term "remission" varies widely. Thus it may be explained why various experts obtain different percentages for spontaneous remissions. Noyes<sup>2</sup>, for instance, assumes that 30% of schizophrenic patients after the first attack, enjoy a comparatively complete spontaneous remission if they have not been ill more than six months. When the modern American and European bibliography is surveyed, one can figure out about 28% spontaneous remissions (results of 15 different authors).

Which cases have a tendency toward spon-



taneous remission? In spite of the difficulties which are met in answering such a question, we have today quite definite directions which give valuable hints to the general practitioner. We follow the guiding principles of the Swiss psychiatric school (Bleuler<sup>5</sup> and Müller<sup>6</sup>).

(A) *Prognosis when the first attack is observed:* Unfavorable for the prognosis of spontaneous remission are all hebephrenic, late catatonic and dementia simplex cases; unfavorable also are all slow-paranoid cases. Prognosis is also unfavorable when a history is obtained of a pre-psychotic schizophrenic way of behavior, especially when combined with asthenic physical make-up; also unfavorable for the prognosis is the fact when psychogenic-reactive trends are retreating in the picture of the psychosis. For the favorable prognosis are acute catatonic cases. Also, all pyknic parts of the whole make-up improve the prognosis. Here we refer to the presence of many psychogenic-reactive trends which are characteristic of the pyknic. On the whole, the more the psychotic picture resembles the manic or melancholic, the better the prognosis.

(B) *Prognosis after the first attack:* Good remissions after previous onsets lead us to expect a fair improvement for this attack. When the patient gets over the critical third attack, we may feel reasonably sure that he will never suffer from a complete deterioration. Of course, in all cases which show, even after the first attack, a distinct deterioration of intelligence, we may look for an unfavorable prognosis.

Summarizing: 70% of all patients affected with schizophrenia do not enjoy any remission worth mentioning. And here our therapeutic possibilities have to be applied. During the last years thousands of experiments in this direction have been tried, which have to a certain extent been reported in the bibliography—and to a probably greater extent have not been reported. But only the insulin shock treatment<sup>9 10</sup>, the Metrazol shock therapy<sup>12</sup>, and the so-called prolonged narcotic treatment<sup>14</sup> have been thoroughly tried on a great number of patients. Finally, the collective (occupational treatment)<sup>15</sup> and

individual psychotherapies are an auxiliary which we cannot neglect.

In the insulin shock therapy (Sakel's Method) we give every day except Sunday for three or four months insulin doses varying between 20 and 300 units which cause the patient to have deep comas ("shocks"). Exact knowledge of the physiologic and the pathologic effects of insulin is essential for the correct performance of this treatment. Because the physician must stay with the patient during the whole hypoglycemic period which lasts the entire morning, this new and strongest weapon in the fight against schizophrenia is not suitable for general practice. Nevertheless, today every general practitioner should know when this new treatment can be utilized, and when not, because it is usually the general practitioner who has to give the patient's relatives the first prognosis.

First of all, cases in which the duration of the illness has not been for more than six months are favorable. Conservation of the affectivity is an important factor. Older cases have a good outlook when the affectivity is well preserved and when there was a former tendency towards spontaneous remissions<sup>16</sup>. But the prognosis is rendered unfavorable (contrary to the spontaneous prognosis!) when psychogenic trends (neurotic symptoms) are present<sup>16</sup>. Also unfavorable are many manic-depressive features in the content of the schizophrenic psychosis; yet, even euphoric-hypomanic features are common in hypoglycemic states<sup>7</sup>. However, of all psychoses with duration up to one year, the paranoids have the best prognosis; in second place are the catatonic excitement states<sup>17 8 22</sup>. Unfavorable prognosis may be made in all hebephrenic cases and in cases where the patient is over 36 years of age<sup>17</sup>.

Unfortunately there are a number of cases which cannot be treated because of physical reasons, in spite of a promising psychic constellation. These are juvenile hypertonia, status thymo-lymphaticus, active tuberculosis, all diseases of the liver, and Basedow's Disease. Absolutely contraindicated for treatment are all cases with angina pectoris and coronary sclerosis<sup>16 18</sup>. In general, we are very cautious in the treatment of patients older than 42 years.

What can be done with the treatment? Statistics compiled from nineteen hospitals in New York State embracing 1,757 cases are given in the following figures<sup>19</sup> and figures of a control group consisting of 1,039 first admissions to the New York State Hospital who did not receive any form of shock treatment<sup>19</sup>:

	Re- covered	Much Imp.	Imp.	Unimp.	Died
Insulin Group:	11.1%	26.5%	26%	35.2%	1.1%
Control Group:	3.5%	11.2%	7.4%	73.3%	4.6%

Statistics which we have compiled from 14 authors in Europe, the United States and Japan in which are included 2,911 insulin-treated patients give nearly the same picture: recovered and much improved, 37.3%; improved, 25.3%; unimproved and died, 37.8%.

Here, however, we must take into consideration the fact that in the figures are included chronic cases. As mentioned above, the earlier the patient comes for treatment, the better the prognosis. A whole series of authors<sup>8 20</sup> have figured more than 80% of full remissions in cases where the psychoses were of no more than six months' duration. The outcome of the treatment is very questionable when the patient has manifested psychotic symptoms for more than two years. Insulin-treated cases who are released with only an incomplete remission, sometimes show a sudden improvement later without any further treatment ("late ripening"). The possibility of such a "late ripening" should always be considered very carefully by the general practitioner because he is frequently questioned by the patient's relatives who were not satisfied with the result of the insulin shock treatment. The occurrence of a relapse should not be denied even when the insulin shock treatment was performed properly. The time has not as yet come when we can give exact figures about the relapses. Humanly speaking, every week which the patient can spend outside of a mental hospital is considered to be of great value. After all, we are not afraid to give a new insulin treatment immediately in case of eventual relapse. In such cases we have usually seen good results after the second course of treatment. The mortality of the insulin-shock therapy, on the whole, according to Strecker<sup>21</sup> is 1%.

Speaking of the real effect of the insulin

shock; we are sorry to confess that we have at present accomplished nothing other than a series of theories and a number of interesting physiological and psychological statements. Nevertheless, the insulin-shock therapy is at the present time *the* method of treatment in nearly all recent cases of dementia praecox because we do not have any better treatment.

Another kind of treatment has come into competition with the insulin-shock therapy which is especially distinguished by a greater simplicity of the method: the Metrazol treatment by Meduna<sup>12</sup>. Meduna based his treatment on the fact that there is antagonism between schizophrenia and epilepsy, anatomically, physiologically and psychologically. So, he tried to produce artificial epileptic seizures to cure schizophrenia. By this method there is introduced into the patient's circulation (intravenously) a 10% solution of Metrazol within the shortest possible time. The starting doses vary between three and five ccm. Immediately after the Metrazol injection heavy tonic-clonic convulsions occur which are preceded by cough. If a typical epileptic seizure occurs, the patient will open his mouth for eight to ten seconds. During that time the physician must put a rubber tube wrapped in gauze into the patient's mouth so that he will not bite his tongue. After a short time the tonic-clonic convulsions slacken and the seizure ends with a more or less long apnoea combined with a deep cyanosis. Lobelin should be in reserve for eventual blockage of respirations. If epileptic seizures do not occur, a further injection with 1 ccm. more than the original dose should be given<sup>13</sup>. Sub-convulsive or "petit mal" doses are not desired because they have a bad effect on the patient's psychic condition. During the convulsion, abduction of the limbs should be avoided and caution should be taken to prevent locking of the jaws. On the average, three injections should be given in one week. The patient should be treated till a maximum improvement or remission can be seen. It is believed, however, that three or four additional seizures should be induced to prevent the possibility of a relapse. We stop the treatment after about 25 grand mal seizures if we do not notice any improvement.



The contraindications for the Metrazol treatment<sup>13</sup> are organic cardiovascular diseases, acute febrile illness, pregnancy, active tuberculosis and abnormalities of the blood or urinary constituents determined by complete laboratory examinations. Great precaution should be taken when there is a history of severe intracranial injury, sero-positive syphilis, latent tuberculosis, or with those patients who have previously remained in bed for a long time (basis for fracture due to osseous changes).

Although Friedman and Meduna<sup>13</sup> have figured that from 2,937 international cases 1,737 (25.09%) have full remissions, the results compiled by the New York Civil State Hospitals<sup>19</sup> are not so promising as the insulin shock results. There are also reported many injuries during treatment, especially vertebral fractures<sup>23, 24</sup>. Many patients do not show the desired retrograde amnesia for the pre-convulsive phases, but are filled with panic for days and even weeks. Many speak of an outspoken "death experience." Many patients who show distinct improvement during the treatment, relapse very easily later into their former psychosis.

We make use of the Metrazol treatment only as proposed by Georgi<sup>25</sup> and Braumühl<sup>16</sup>; i. e., we use the Metrazol shock only to support the insulin-shock therapy in obstinate catatonic states. Especially valuable here is the summation method<sup>25</sup> where Metrazol convulsions are produced on a hypoglycemic basis; thus the psychic shock of the Metrazol method can be avoided. In this case, smaller doses of Metrazol solution may be used.

Nevertheless, we must admit that there are found old cases, especially catatonics, who are benefited more by Metrazol than by insulin. The general practitioner can perform such a treatment once in a while in juvenile catatonic patients; but it is necessary that the physician stay for about a half-hour with the patient after the convulsion is over (collapses!), and it is also necessary that the patient remain under supervision for the remainder of the day. With the Metrazol treatment, a better prognosis, also, may be made if the patient is started soon after the onset of his psychosis<sup>13</sup>.

Good results can also be seen sometimes in

another treatment for schizophrenia which was used especially in Europe and invented there by Klaesi<sup>14</sup>: that is the treatment with prolonged narcosis. With this treatment the acute excited catatonic patients and also the excited hebephrenic patients sometimes react very favorably<sup>26</sup>. Results can sometimes be seen when old chronic schizophrenic cases are treated, especially in regard to their "frozen" asocial habits.

In prolonged narcosis treatment, the patient is kept for eight to ten days in a narcosis which is produced by enteral and parenteral drugs, like Dial, Somnifen, Cloetal, and Sodium Amytal. During the state of narcosis, patient is given nourishment by drop enemas. Narcosis treatments are somewhat dangerous and can be performed only in a special hospital with a trained staff.

It goes without saying that all mentioned physical treatments must be supported by a proper psychotherapy. The aim of this psychotherapy is to bring the patient out of his autism. Much is gained when a "transference" is produced between the patient and the physician. Soon the patient will assume further relations with other environments. One of such further relationships to reality which the patient has to gain is interest and pleasure in his work. Finally the physician must make certain that the patient desists, after a certain time, from his delusional ideas. Therefore, it is necessary to tell the patient what is wrong in his ideas and perceptions; but that should not be done too early.

Whether a completely developed schizophrenia can be treated only by psychotherapy is a question on which experts disagree. Probably a reasonable individual and collective psychotherapy may make the mechanism of the self-healing easier. It should be remembered that a neurotic patient suffers from a too great "repression" while the schizophrenic has not enough "repression"<sup>6</sup>. Many levels of the subconscious which make the vital nucleus of the personality are forced open in a schizophrenic case. Therefore, every treatment should be avoided which may promote any further eruption of the subconscious. Freud himself declares that a psychoanalytic treatment for schizophrenic patients is not usually suitable<sup>27</sup>. Too early question-

ing and speaking of psychotic symptoms may be followed by severe relapses. From the same point of view, it may be considered as absolutely dangerous to perform any hypnotic treatments on these patients.

Without any doubt today we are in the beginning of the treatment of schizophrenia. Neither insulin, Metrazol therapy, or occupational therapy is a sufficient medical answer to the diagnosis of schizophrenia. Assiduity, activity, and sacrifice have brought this difficult problem nearer a solution during the last few years. We cannot hesitate to assume that such powers will sometime bring the definite solution.

The author received personal experience in all above described therapies in the Kantonal Institution for Care and Treatment, Munsingen, Switzerland (Superintendent, P.-D. Dr. Max Müller) during 1937 and 1938. From this experience, the author prefers the insulin-shock treatment to all methods. Next to Vienna it was this hospital which was the starting place for this new and promising kind of treatment.

Favorable results of a large number of insulin-treated cases by Dr. Müller induced the author to recently introduce this treatment in the Augusta State Hospital under the supervision of Forrest C. Tyson, M. D., Superintendent. Here among six schizophrenic cases, five of which are still under treatment, two show a distinct improvement and two a slight improvement. In one case the treatment has been brought to an end and at present the patient enjoys considerable improvement.

#### SUMMARY

Schizophrenia is not only a problem for the psychiatrist but for the general practitioner as well. The quick, correct diagnosis and the resulting prognosis may be of greatest importance to the patient as well as to his environment. A few simple hints are given regarding the prognosis of dementia praecox, especially as it pertains to spontaneous remissions.

In spite of the 28% spontaneous remissions, there remain a great number of patients who need therapy. Here especially, the insulin-shock therapy (Sakel's Method) has

shown the best results. This method, however, is not advisable for use by the general practitioner; yet he must know when it may be used and when not. The knowledge of "late ripening" and eventual relapses is important to him.

Metrazol therapy has not shown as good results as have been seen in the insulin-shock therapy. Also, for other reasons (fractures, "death-fear" in Metrazol shock) the insulin-shock therapy is preferable. It must be admitted, however, that in some cases, especially juvenile stuporous catatonics, the Metrazol therapy may be more valuable; also it is possible for this method to be performed by the general practitioner. After briefly mentioning the treatment with prolonged narcosis, a few fundamental principles are given for individual and collective psychotherapy of schizophrenia as far as they are important to the general practitioner.

#### BIBLIOGRAPHY

1. Zubin, Joseph: *The Psychiatric Quarterly*. Vol. 13; 1. Pg. 173-177.
2. Noyes, Arthur P.: *Modern Clinical Psychiatry*. W. R. Saunders, Philadelphia and London, 1939.
3. Bumke, Oswald: *Lehrbuch der Geisteskrankheiten*. J. F. Bergmann, München, 1936 (Pg. 529.)
4. Lange, Johannes: *Allgemeine Psychiatrie*. Joh. A. Barth, Leipzig, 1927. (Pg. 213.)
5. Bleuler, Eugen: *Lehrbuch der Psychiatrie*. Jul. Springer, Berlin, 1937.
6. Müller, Max: *Prognose und Therapie der Geisteskrankheiten*. Georg Thieme, Leipzig, 1936.
7. Müller, Max: *Insulinbehandlung und Heilungsverlauf der Schizophrenie*. *Psychiatrische en Neurologische Bladen* (Holland). Jaargang, 1938. No. 5 en 6.
8. Müller, Max: *The Insulin Therapy of Schizophrenia*. *The American Journal of Psychiatry*. Vol. 94, Supplement. Pg. 5-23.
9. Sakel, Manfred: *Neue Behandlungsmethode der Schizophrenie*. J. Perles, Wien, 1935.
10. Sakel, Manfred: *Pharmacological Shock Treatment of Schizophrenia*. Nervous and Mental Disease Publishing Co., Washington, 1938.
11. Meduna, L. v.: *Die Konvulsionstherapie der Schizophrenie*. Carl Marhold, Halle, 1937.
12. Meduna, L. v.: *General Discussion of the Cardiazol Therapy*. *American Jour. of Psy.*, Vol. 94, Supplement. Pg. 40-50.
13. Meduna, L. v., and Friedman, E.: *The Convulsive-Irritative Therapy of the Psychoses*. *J. A. M. A.*, Vol. 112, No. 6. Pg. 501-509.
14. Kläsi, J.: *Ueber die Therapeutische Anwendung der "Dauernarkose" mittels Somnifen bei Schizophrenen*. *Zeitschr. f. d. ges. Neur. and Psych.*, 74:557-592 (1922).



15. Simon, H.: Aktivere Behandlg. in der Irrenanstalt. Walter de Gruyter & Co., Leipzig and Berlin, 1929.
16. Braunmühl, A. v.: Die Insulinschockbehandlg. der Schizophrenie. J. Springer, Berlin, 1938.
17. Niver, E. O., Weiss, S., and Harris, T. H.: Insulin-Hypoglycemia Treatment of Schizophrenia. *American Jour. of Psych.*, Vol. 95:4. Pg. 799-807.
18. Hadorn, W.: Untersuchungen des Herzens im H. G. Schock. *Archiv f. Kreislau fforschung*. Band II. Heft 1-5 (1937).
19. Ross, John R., and Malzberg, Benj.: A Review of the Results of the Pharmacological Shock Therapy and the Metrazol Convulsive Therapy in New York State. *Am. Jour. of Psych.*, Vol. 96:2. Pg. 317-327.
20. Frostig, J. P.: Experiences with the Insulin Therapy in Schizophrenia with Special Reference to Clinical Problems. *Am. Jour. of Psych.*, Vol. 94, Supplement. Pg. 220-226.
21. Strecker, H. P.: A Comparison of Insulin and Cardiazol Convulsion Therapies in the Treatment of Schizophrenia. *Lancet*, 1:371 (Feb. 12), 1938.
22. Krasnushkin, E. K., and Khanlaryan, G. M.: Insulin Shock Treatment of Schizophrenia. *Sovet. psikhonevrol*, 13:5, 1937. (Russ.)
23. Polatin, Ph., Friedman, M. M., Harris, M. W., and Horwitz, W. A.: Vertebral Fractures Produced by Metrazol Induced Convulsions. *J. A. M. A.*, Vol. 112:17. Pg. 1684-1687.
24. Bennett, B. T., Jr., and Fitzpatrick, C. P.: Fracture of the Spine Complicating Metrazol Therapy. *J. A. M. A.*, Vol. 112:22. Pg. 2240.
25. Georgi, F., and Strauss, R.: The Problem of Convulsions and Insulin Therapy, II. *Am. Jour. of Psy.*, Vol. 94, Supplement. Pg. 76-89.
26. Gillespie, R. D.: Narcosis Therapy: Critical Review. *Jour. of Neur. and Psych.*, London, 2:1939 (Jan.). Pg. 45.
27. Freud, Sigmund: According to Noyes (2), (Pg. 472).

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Dr. Robert T. Phillips—Continued from page 98

requires time, patience, perseverance and optimism as well as a wide angled approach toward the reconstruction and restoration of the patient's "physiological equilibrium."

#### BIBLIOGRAPHY

1. Goldthwait, J. E.; Brown, L. T.; Swaim, L. T.; and Kuhns, J. G.: Body Mechanics, Lippincott, 1934.
2. Phillips, Robert T.: Practical Measures for the Management of Chronic Arthritis in the Home, *Medical Clinics of North America* (March), 1937.
3. Pemberton, Ralph: President's Address, the American Rheumatism Association, *J. A. M. A.* 113, pp. 1060-1061 (Sept.), 1939.
4. Phillips, Robert T.: Practical Physical Medicine for Chronic Arthritis, *New England Journal of Medicine*, 218: 639-641 (April), 1938.
5. Smith-Petersen, M. N.: Arthroplasty of the Hip, a New Method, *Journal of Bone and Joint Surgery*, 21: pp. 269-288 (April), 1939.
6. Bauer, Walter: What Should the Patient with Arthritis Eat?, *J. A. M. A.* 104, pp. 1-6 (Jan.), 1935.
7. Personal communication.
8. Key, J. A.: Rosenfeld, H., and Tjoflat, O. E.: Gold Therapy in Proliferative (Especially Atrophic) Arthritis, *Journal of Bone and Joint Surgery*, 21: pp. 339-345 (April), 1939.
9. Hartfall, Garland and Goldie: *Lancet*, 2: 8 (July), 1935, and also *Lancet* (Oct. 2 and 9), 1937.
10. Phillips, Robert T.: The Treatment of Arthritis with Gold Salts, *New England Journal of Medicine*, 214: pp. 114-115, (Jan.) 1936.
11. Freyberg, R. H.; Block, W. D.; and Fromer, B. S.: Sulfur Metabolism and the Effect of Sulfur Administration in Rhenmatoid Arthritis, *J. A. M. A.*, 113 (Sept.), 1939.

Patch test for children—One hundred and sixty-nine children at Sea View Hospital, Staten Island, New York, were given the Mantoux intracutaneous tuberculin test together with the tuberculin patch test and it was found that only one failed to react to the patch test who reacted positively to the Mantoux test. One hundred and eighteen additional children were tested in the pediatrics service at Mount Sinai Hospital in New York

and the Mantoux test revealed no case which had not been discovered by the patch test. The value of the patch test for young children appears to be firmly established and it has the additional advantages that it never provokes a general reaction and never frightens either the children or the parents.—VOLLMER, H., and GOLDBERGER, E. W., *Amer. Jour. Diseases of Children*, Sept., 1938.

## *A Critical Evaluation of Skin Tests in Allergy*

By ANGELO L. MAIETTA, M. D.\*, Winchester, Massachusetts

Charles Harrison Blackley in 1873 was the first to demonstrate skin tests as a diagnostic method for determining an offending allergen. Since then, skin tests have formed the backbone of allergy. They are the dramatic part of the picture and have given to allergy the impetus of its popularity.

The object of the skin test is to demonstrate that the patient reacts to some foreign substance in a way different than normal individuals. The foreign substances or allergens employed for testing purposes must possess two qualities<sup>1</sup>; first, that they are non-irritating to normal persons, and second, that they must be active and show specific reactions in persons sensitive to them.

Briefly let us consider the different methods of doing skin tests. The first one and the simplest one is the scratch test. By simply placing the allergen on the skin and making a superficial scratch through it, the test is done. Many scratch tests can be done at one sitting because this method is very safe. However, they leave telltale marks and occasionally bloody areas. Also, they are somewhat painful. Next, there is a new test that I have used extensively — the multiple epidermal puncture test<sup>2</sup>. This method allows the placing of the allergen on the skin and making ten to twelve epidermal punctures through the material directly into the epidermis. The advantages of this method are that it does not draw blood, does not leave telltale scars, is not painful, and is very sensitive. It is also safe; a large number can be performed at one sitting. Another method is the intradermal test. The intracutaneous technic consists in placing a small amount of a known concentrated allergen in solution between the layers of the skin. This method is very sensitive and also dangerous. Only a few tests are indicated at one time. Another diagnostic method is the patch test. This is primarily the dermatologists' contribution to allergy. The material to be tested is placed on an adhesive gauze patch and left in contact with the skin for twenty-four to forty-eight hours.

A modification of this test is the patch abrasion<sup>3</sup> method which consists in first making an abrasion on the skin and then applying the patch test material over it.

The choice of method is important. Either scratch tests or multiple epidermal punctures should be preferred. In a highly sensitive patient, intradermal tests are very dangerous, oftentimes producing anaphylatic symptoms. A good rule to follow is to do the scratch tests first, then, if they prove unsatisfactory, a few intradermal tests are in order. The patch test is limited to dermatological conditions, principally eczema, contact dermatitis, and industrial dermatoses.

Positive reactions are usually immediate occurring from about five to twenty minutes. However, positive reactions may also be delayed<sup>4</sup> — occurring in about twelve to twenty-four hours. These delayed reactions are encountered occasionally in adults while testing for food sensitivity, and are almost always the rule in bacterial, mold, and fungus sensitivity.

Thus far it seems that skin testing is an easy procedure that anyone could do correctly with no instruction or after reading a paragraph or two which usually accompanies commercial test material. It is by no means this simple. The technical performance of skin tests can be carried out by anyone after a certain amount of training, but the interpretation of them, at times, presents such formidable difficulties that even keen students of the subject are incapable of correct interpretation. One would like to feel that the reaction which occurs between the allergen and skin of the patient is the one to which he is clinically sensitive. Unfortunately this is not always the case. In many cases there is a marked discrepancy between positive reactions and clinical manifestations. It is this variation that presents the problem of correct interpretation. It must be pointed out that the cases in which there is a definite uncomplicated correlation between positive tests and clinical sensitivity are definitely in a small

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group. By this, I mean, a patient who has ragweed hay fever exhibits positive tests only to ragweed and is negative to all other testing substances. This group will give a clear-cut history and clear-cut positive tests. The bulk of cases, however, present multiple positive tests. For example, a patient whose clinical symptoms indicate ragweed sensitivity may exhibit positive reactions to not only ragweed but also to various grasses, house dust, and other allergens. I have seen patients who gave positive reactions to most of the allergens for which they were tested. I have also observed cases in which the skin was irritable, where a moderate amount of dermatographism existed, in which all the tests, including the control, were positive. The problem here is to determine which of these positive tests have a clinical significance — a sort of separating the wheat from the chaff. Usually, however, many patients will exhibit positive tests but will have no corresponding clinical sensitivity. This also is so in normal non-allergic individuals who give positive reactions to ragweed and still exhibit no allergic symptoms during the ragweed season. It is obvious then that some of these tests are false positives and have no diagnostic value.

There is also another group of patients who give negative reactions to all test substances. Fortunately this is a very small group, but it is a definite stumbling block. Here the patient will manifest allergic symptoms during the ragweed season and still all skin tests either scratch or intradermal to ragweed are persistently negative. In this type of case, the situation becomes extremely stubborn when multiple sensitivity exists and skin tests fail to demonstrate it. It would be unwise to explain to this patient that he is not allergic simply because his skin failed to yield positive tests.

The question now arises what is to be done in cases of this type. How is one to know

which positive tests have a clinical and diagnostic significance? The answers are many and lengthy but can be summed up briefly as follows: The approach to the allergic patient must be through internal medicine. The patient must be studied as a whole unit. A complete detailed history is the first and paramount requisite. This oftentimes is a lengthy procedure but nevertheless a very valuable one. The history will point the way. Many important facts will be brought to light which will give presumptive evidence as to the type of allergy. Skin tests, at best, can only furnish corroborative evidence to the history. In doubtful cases, resort must be had to other diagnostic procedures such as the conjunctival test, nasal inhalation test, indirect test, environmental and provocative tests, etc. Finally, after it has been determined that an allergen is an etiologic factor, the symptoms can be and sometimes are inadvertently reproduced upon contact with the particular substances — thus giving final proof as to the causing allergen.

#### SUMMARY AND CONCLUSIONS

Skin tests per se should not be considered diagnostic. At best they present only corroborative evidence.

In themselves they are inconclusive, and any treatment which is based solely upon skin test interpretation may meet with failure.

#### REFERENCES

1. Rackemann, F. M.: *Asthma and Hay Fever*, Chapter IX, pg. 202, 617 pages, The Macmillan Co., N. Y., 1931.
2. Maletta, Angelo L.: Multiple Epidermal Puncture Test, *New Eng. Jour. of Med.*, 221:675, 1939.
3. Vaughan, Warren T.: *Practice of Allergy*, Chapter XIX, pg. 183, 1,082 pages, The C. V. Mosby Co., St. Louis, 1939.
4. Vaughan, W. T.: Allergic Eczema, *J. Lab. and Clin. Med.*, 13:24, 1927.

The bovine type of tubercle bacillus causes 9.6% of extra-pulmonary tuberculosis in Canadian children under 14 years of age. *In every instance investigated the children had been fed raw milk. Efficient pasteuriza-*

*tion of milk would eliminate bovine tuberculosis in five years.* It has been estimated that the number of infected animals is now less than 30% in Canada.—PRICE, R. M., *Can. Pub. Health Jour.*, June, 1938.

## The President's Page

The reversal by the United States Court of Appeals of Justice Proctor's decision, that the practice of Medicine is a Profession, and therefore not subject to the provisions of the Sherman Antitrust Act, probably sets the stage for a renewal of the campaign of propaganda intended to discredit the Medical Profession.

The Decision does not challenge the assumption that the practice of Medicine is a profession, but asserts that all professions and callings come within the scope of the Act, and therefore are of equal interest to the lawyers and the Trade Unions.

The vicious attack upon the American Medical Association in the *Liberty Magazine* of March 9th is a sample of what we may expect, and is also a demonstration of the New Deal smearing tactics supposed to be useful in preparing for future legislation.

The handwriting on the wall indicates clearly that the fight to preserve the American way of practicing medicine has only begun, and also that if the New Dealers are successful in the National election, we may expect an offensive on the scale of the Wagner National Health Act.

The American Medical Association is by no means helpless. Its well over one hundred thousand members are probably more than 90% loyal and determined supporters of its policy of resistance to political control.

Moreover, it is becoming increasingly evident that the attacks on the Medical Profession are only part of the plans to extend Federal control over wider areas of our National life, and that all citizens are likewise affected.

We hope that the citizens of this Country will realize this in time, and if they do, we have no doubt of the result.

Never was it so important that our Medical organizations be kept strong and united.

These matters should be taken up at all of our County and State meetings, and thoroughly discussed, and every member should exert himself to know all available facts on the situation.

There is one place where, if there were enough of us, we might wipe out the whole New Deal program at one blow, and in my opinion we should concentrate all of our influence on the attempt to do so.

That place is the ballot box.

GEORGE L. PRATT, M. D.,  
*President, Maine Medical Association.*



## Editorials

### *A Border Incident—North America*

The "Border without Bayonets" has been much in the spotlight of publicity in these times of international conflict, but its story has not all been told.

An incident which concerns this Association deserves mention. Late in August, in those last few anxious days of peace, our neighbor, the New Brunswick Medical Society, held its annual meeting at St. Andrews-by-the-Sea, which, as is well known to many of our members, is near the Maine border. It had been hoped that it might be a joint meeting with Maine, but circumstances prevented. Nevertheless, our members were individually invited to attend, and a fair number accepted.

Those of us who visited St. Andrews were delighted. New Brunswick hospitality was gracious. Maine men were received with friendly courtesy and were not long allowed to be strangers. The accommodation of the Canadian Pacific Railway's Algonquin Hotel was superb. The late summer weather was perfect; the golf course excellent; food and drink unsurpassed. The scientific program was of high quality and was strikingly international with papers by Drs. Frank Patch and L. C. Montgomery of Montreal, Paul White and Donald Munro of Boston. Papers were concise and timely, well presented and ably discussed. In short, a pleasanter or more profitable gathering of medical men would be difficult to arrange.

It seems certain that the officers of the New Brunswick Medical Society who organized this meeting had no thought that it had unusual significance, but brief reflection makes it clear that it had meaning which transcends the pleasant fellowship and stimulating discussions. To be sure, medicine is international and it ought not to arouse comment that medical men of two great nations can meet in peace and friendship, eat and drink together and consider common problems. But how many international boundaries exist today which do not prevent such intercourse? Where else is medicine free?

### *Federal Hospitalization of Veterans*

Under date of January 5th, a letter to the President of the Maine Medical Association by L. C. Fortier, Commander, The American Legion, Department of Maine, calls attention to a condition that would hardly seem possible except perhaps in a most extreme case. "The Federal Laws provide that in cases where a veteran is suffering from a disability, either service connected or not, he is privileged to apply for and receive federal hospitalization through the medium of the Veterans' Administration." In non-service connected cases, the veteran must show that he is without adequate personal funds to provide for such hospitalization. Commander Fortier states that in many instances those in local authority have attempted the hospitalization of veterans "where the most obvious principles of medicine and surgery very definitely showed that the patient should either not be removed from his home or it was imperative that he receive hospitalization locally. As a result of such a questionable practice, many have *died* enroute to the federal hospital and others have been forced to undergo long periods of unnecessary suffering." He also states that such a deplorable practice arose from the fact that local civil authorities, anxious to avoid more expense to their local government, have transported to the Facility at Togus, patients obviously so critically ill that the extra exertion resulted in a fatal issue or caused suffering of an increased gravity and intensity.

It hardly seems possible that any person, veteran or not, could possibly be subjected to such inhumane treatment and it would seem to the JOURNAL that the responsibility and results of such practices properly become the burden of the official civil authorities. Certainly it must be felt that no physician would warrant the moving of patients so obviously ill that life and safety would dictate that only under dire necessity would removal be advised, and only in plain view of the risks involved. It is earnestly hoped for the sake

of veterans involved in need of hospital facilities, that they be treated by civil authorities with nothing more than the consideration that a sick person almost automatically re-

ceives. Exploitation of a seriously sick human being to "cut down expenses" is something out of keeping with plain regard for ordinary decency.

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## *The Eighty-eighth Annual Session*

ceptional recreational advantages of this location are familiar to us all. The Scientific

The annual session of the Maine Medical Association will be held at Rangeley Lakes, Sunday, Monday and Tuesday, June 23rd, 24th and 25th. The natural beauty and excellent Committee is endeavoring to make this year's program the finest ever.

Sunday evening Mr. Frank Lane of Boston will be present to entertain with his unusual skill at legerdemain. The system of morning conferences which proved so successful last year at Poland Spring will be continued this year. We believe that something of real value to every member of the Association is provided by this arrangement.

Monday afternoon will again be devoted to a Clinico-pathological discussion. An added feature will be a discussion of the use of sulfapyridine and allied compounds by a recognized authority. In the evening, an ever-popular dinner dance is planned, and V. W. Peterson of The Federal Bureau of Investigation is to speak.

Tuesday afternoon, Dr. Henry Marble, Dr. Timothy Leary of Boston and Dr. P. L.

B. Ebbett of Houlton are to address us on subjects of general interest. Governor Barrows will speak following the banquet in the evening, and we have the unusual distinction of having Dr. Morris Fishbein, Editor of the *Journal of the American Medical Association*, with us for the second successive year. He will speak on "Quackery in Medicine."

Mrs. Pratt and Mrs. Weymouth are arranging special entertainment for the ladies, and we believe it is no secret that what they do is done well. It seems probable that the scientific and commercial exhibits will be the largest and best ever.

Your Committee wishes to thank all those who have so enthusiastically assisted in arranging what we hope will be a program of unusual interest and value. At no time has a strong Association been more necessary than now. Every member may contribute to this strength by making a serious attempt to attend this session.

MERRILL S. F. GREENE,

*Chairman, Scientific Committee.*

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Arithmetic Problem — If the average case of minimal tuberculosis admitted to the sanatorium stays 8 months, and the average case of moderately advanced tuberculosis stays 23 months, how much could be saved by early diagnosis?

In Connecticut where it costs about \$1,000 to keep a patient in the state sanatorium for a year and where only 10% of the admissions are in the minimal stage, it is estimated

as hundreds of thousands of dollars by the Connecticut State Tuberculosis Commission.

Unfortunately, the situation in Connecticut is not unique among the states. Everywhere admissions to sanatoria are largely in the later stages, and everywhere the result is a longer hospital stay — a tragic waste whether human suffering, disability or money is considered.



## Maine Public Health Association

### Announcement

#### 1940 Early Diagnosis Campaign for the Prevention of Tuberculosis

For the 13th consecutive year the Early Diagnosis Campaign sponsored by the National Tuberculosis Association and its 2,000 affiliated organizations will be conducted in the month of April.

Slogan—THE X-RAY REVEALS TUBERCULOSIS BEFORE THE SYMPTOMS APPEAR.

Purpose—To teach the importance of using X-ray as a necessary tool in securing an early and correct diagnosis.

Coöperative Agencies—Maine Federation of Women's Clubs, industries, bakeries, milk dealers, high schools, colleges, Maine Medical Association, District Health Officers and staff nurses, Red Cross Services and individual citizens.

Publicity Agencies—Press, radio, trade bulletins, exhibits, use of films, poster and pamphlet distribution and church organizations.

Devices—The six State Governors of New England are endorsing the Campaign through a signed proclamation which will be given to the press to announce the Campaign. State newspapers will carry the rotogravure section. Newspapers will carry special stories of the Campaign.

Through the courtesy of the District Health Officers and radio chairmen of the Federation of Women's Clubs, time will be given for special broadcasts. A radio transcription will be given to Maine Stations for use during the Campaign.

Women's Clubs will distribute pamphlets and posters in their own towns. Industries will carry the pamphlets in pay envelopes. Milk dealers will use bottle caps carrying the slogan and announcing it. High schools will participate in the Campaign by becoming entrants to the Slogan and Editorial Contests. Announcement of the Campaign will be given through the churches on Early Diagnosis Sunday. Through local committees, public waiting rooms, hospitals, doctors' offices and libraries will be provided with pamphlets and posters.

Inmates of Sanatoria who are able are being asked to write a letter to a friend outside the sanatorium urging a health check-up with an X-ray.

Special letterheads advertising the Campaign will be used by committees and organizations.

## Women's Field Army of Maine

Prior to 1937 no provision had been made in the financial set-up of either the State or hospitals for the treatment of needy tumor patients. Realizing this fact the Women's Field Army of Maine in the very beginning established the Dr. Joseph W. Scannell Memorial Fund for the treatment of indigent tumor patients, by X-ray or radium—two of the most expensive and essential items in the control of the disease.

Since the inauguration of the Women's Field Army in 1937 records show a constant increase in the attendance at these clinics. Of the number of patients coming to the clinics a greater proportion are coming early and are therefore curable cases.

The six tumor clinics are:

*Maine General* (Portland)

*Eastern Maine General* (Bangor)

*Thayer* (Waterville)\*

*Sisters* (Waterville)\*

*Central Maine General* (Lewiston)

*St. Mary's General Hospital* (Lewiston)

\* Clinics combined.

### Maine Division

1937-38—600 patients examined at the six clinics. Of this number the Women's Field Army, Inc., of Maine assisted in financing the treatments for 147.

May 1, 1938, to May 1, 1939—Approximately 950 patients were examined at the six clinics. 309 cases assisted by the Women's Field Army.

May 1, 1939, to February 1, 1940—750 patients were examined at the six clinics. 222 cases were assisted by the Women's Field Army.

#### SET-UP OF THE WOMEN'S FIELD ARMY

1 State Commander—1 Secretary.

16 Vice Commanders.

16 Deputy Vice Commanders.

142 Majors of Districts. They secure captains of cities or towns in units.

1 Publicity Director—part time.

1,000,000 pieces of literature for distribution.

1,000 booklets and letters to the doctors of Maine.

1,000 booklets and letters to the ministers of Maine.

List not yet completed for booklets and letters to Special Givers.

\$25,000.00 goal of 1940 campaign. The Maine Legislature has appropriated \$5,000.00 for the fiscal year ending June 30, 1940, and also for the fiscal year ending June 30, 1941.

Financial Statement of Women's Field  
Army for Control of Cancer,  
1937-1939

Received from 1937 campaign,	\$14,900.36
Received from 1938 campaign,	18,051.05
Received from 1939 campaign,	13,041.98
Received from State Legislature —1939,	5,000.00
	<hr/> \$50,993.39
Paid to American Society for Control of Cancer—1937,	\$4,481.36
Paid to American Society for Control of Cancer—1938,	3,163.75
Paid to American Society for Control of Cancer—1939,	2,400.00
	<hr/> \$10,045.11
Expense of Administration and Education, 1937-38,	
Expense of 1937 campaign,	
Expense of 1938 campaign,	\$7,161.59
Expense of Administration and Education, 1938-39,	
Expense of 1939 campaign,	6,261.27
	<hr/> \$13,422.86
Budgeted for Administration and Education, 1939-40 and Expense of 1940 campaign,	\$5,600.00
Paid out for treatments for needy cancer patients, 1937- 38,	\$4,938.20
Paid out for treatments for needy cancer patients, 1938- 39,	9,082.19**
	<hr/> \$14,020.39
Paid out for treatments for needy cancer patients from May 1, 1939, to January 31, 1940,	\$5,858.22

\*\* \$3,236.00 of this amount was paid out of our 1939 campaign funds to cover treatments given to 115 patients during the period between October 1, 1938 (when our fund became exhausted), and May 1, 1939.

Summer Round-up of Children

The National Congress of Parents and Teachers through their Chairman of The Summer Round-up of Children, Doctor Lillian M. Smith of Lansing, Michigan, would like to develop a co-operative plan with the practicing physicians in the various States to have all pre-school children undergo an examination. In accordance with the plan a meeting of the President of the State Parent Teachers Association, The Division Director of the Children's Bureau and interested physicians is proposed for consideration of an active campaign in Maine. Results of the meeting with suggestions for organization will appear in another issue of the JOURNAL.

Tufts Medical School Receives Gift

A gift of \$42,200.00 to Tufts Medical School by Dr. and Mrs. George C. Averill of Waterville was announced in February by President Carmichael. Realizing the importance of the school in its work of having physicians whose major field of activity is the New England States, Dr. Averill correctly feels that the students of today, who are the physicians of tomorrow, should be provided with all possible opportunities in their studies in anatomy; a subject which concerns every physician from the time he begins his study of medicine until his work is finished; hence, the fund is to be devoted to the establishment of the "Dr. and Mrs. George H. Averill Department of Anatomy in memory of Professor Charles P. Thayer."

The JOURNAL extends its congratulations to Tufts in the greater opportunities afforded it by such a gift, and to Dr. and Mrs. Averill its sincere appreciation of their generosity to so deserving a New England institution. Maine institutions of learning are not without substantial proof of Dr. and Mrs. Averill's interest and their support in the maintenance of high educational standards they justly feel is an investment already showing dividends worthy of their continued faith in New England schools and New England men and women.

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## County News and Notes

### 100% Paid-Up Membership for 1940

*Piscataquis County Medical Society*, N. H. Nickerson, M. D., Greenville, Secretary.

*Sagadahoc County Medical Society*, Jacob Smith, M. D., Bath, Secretary.

*Franklin County Medical Society*, James Reed, M. D., Farmington, Secretary.

*Somerset County Medical Society*, Maurice E. Lord, M. D., Skowhegan, Secretary.

*Waldo County Medical Society*, Raymond L. Torrey, M. D., Searsport, Secretary.

### Cumberland

#### Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, March 5, 1940, at 8.15 P. M., with the President, Dr. F. A. Ferguson, presiding. Thirty members were present.

Dr. Joseph E. Porter was elected to membership.

Miss Van Spanje, Nutritionist for the Portland Chapter of the American Red Cross explained to the Club the Nutrition Program of the Chapter.

The Club voted to contribute \$50.00 toward the work of the National Physicians' Committee for the Extension of Medical Service.

Dr. E. R. Blaisdell presented an instructive paper on *Treatment of Massive Hemorrhage in Gastric and Duodenal Lesions* and Dr. Jack Spencer explained *X-ray Studies of Gastric and Duodenal Lesions*.

Dr. E. H. Drake, Dr. D. H. Daniels, Dr. R. S. Hawkes, Dr. J. E. Porter, Dr. T. C. Bramhall, Dr. I. M. Webber, Dr. E. E. O'Donnell, and Dr. F. A. Ferguson participated in the discussion.

ALICE WHITTER, Secretary.

### Kennebec

A meeting of the Kennebec County Medical Association was held at the Gardiner General Hospital, Gardiner, Maine, Thursday, March 21, 1940.

Clinical session at 5.00 P. M. which was presided over by Frederick R. Carter, M. D., Secretary:

(1) Pregnancy complicated by Poliomyelitis—M. E. Joss, M. D.

(2) Subdiaphragmatic Abscess—F. B. Bull, M. D.

(3) (a) Acute Mastoiditis complicated by Erysipelas.

(b) A Case of Mononucleosis—Allan Hurd, M. D.

(4) Acute Appendectomy with large enterolith—A. B. Libby, M. D.

(5) Hematemesis—C. G. Farrell, M. D.

(6) Pneumonia—C. R. McLaughlin, M. D.

Dinner at 6.30 P. M., which was followed by a business meeting.

Minutes of the last meeting were read and approved.

It was voted that the Kennebec County Medical Association go on record as approving the work being done by the National Physicians' Committee for the Extension of Medical Service.

It was voted to leave the matter of an appropriation of a sum of money for donation to the National Physicians' Committee for the Extension of Medical Service to the Council.

James E. Poulin, M. D., Waterville, Maine, and Samson Fisher, M. D., Oakland, Maine, were elected to membership.

The address of the evening was given by Dr. G. W. Brow of the Royal Victoria Hospital, Montreal, P. Q., whose subject was *Cardiac Emergencies and Their Treatment*. This paper was very interesting, ably presented, and well discussed.

There were 42 members and guests present.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,  
Secretary.

### New Members

#### Androscoggin

Irvin A. Schaen, M. D., Lewiston, Maine.

#### Cumberland

Victor H. Simecek, M. D., Brunswick, Maine.

#### Kennebec

James E. Poulin, M. D., Waterville, Maine.

Samson Fisher, M. D., Oakland, Maine.

#### Washington

Allan H. Knapp, M. D., Machias, Maine.

### Coming Meetings

#### State Medical Associations

Connecticut State Medical Society, Creighton Barker, M. D., 258 Church Street, New Haven, Secretary.

Annual Meeting—Hartford May 22-23, 1940.

Maine Medical Association, Frederick R. Carter, M. D., 22 Arsenal Street, Portland, Secretary.

Annual Meeting—Rangeley Lakes, June 23-25, 1940.

Massachusetts Medical Society, Alexander S. Begg, M. D., 8 The Fenway, Boston, Secretary.

Annual Meeting—Boston, May 21-22, 1940.

New Hampshire Medical Society, C. R. Metcalf, M. D., 5 S. State Street, Concord, Secretary.

Annual Meeting—Manchester, May 14-15, 1940.

Rhode Island Medical Society, Guy W. Wells, M. D., 124 Waterman Street, Providence, Secretary.

Annual Meeting—Providence, June 5-6, 1940.

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## Army Experience for Physicians

An interesting medical corollary to the augmentation of the United States Army during 1940 and 1941 and to the planned large scale Army maneuvers during the spring and summer of 1940 is the broad medico-military experience which a great number of civilian physicians will receive. Medical Reserve officers are being used to augment the entire Army Medical Service, which includes everything from small unit installations to large Station Hospitals, General Hospitals, and hospitals designed primarily for the treatment of specific types of cases.

Physicians under 35 years of age who are desirous of obtaining extended active duty with the Army, but who do not hold Reserve commissions, are being offered appointments in the Medical Corps Reserve in the grade of 1st Lieutenant, in order to permit them to be placed on such duty. Captains and Lieutenants are at present being offered excellent assignments throughout the continental United States, and it is hoped that authority will be granted to actually permit some officers to go to Hawaii and Panama. In addition to having a new and very busy experience in the practice of medicine, the average officer finds the pay and allowances attractive. The pay and allowances for a married 1st Lieutenant amount to approximately \$263.00 a month; for a single 1st Lieutenant to approximately \$225.00 a month; for a married Captain to approximately \$316.00 a month; and for a single Captain to approximately \$278.00 a month. In most cases the above pay and allowances would apply inasmuch as Government quarters are not usually available for officers on extended active duty. In the few instances where Government quarters are available, the amounts would be \$40, \$60, \$60, and \$80 less per month respectively. In

addition, the officer is reimbursed for mileage traveled from his home to his station, and upon completion of his tour of duty is reimbursed similarly for the travel to his home.

Application for one year of active duty, or for appointment in the Medical Corps Reserve with a view to obtaining one year of active duty with the Army, should be requested at once by a letter addressed to the Commanding General of the Corps Area\* wherein the physician permanently resides. In addition, the application should contain concise information regarding permanent address, temporary address, number of dependents, earliest date available for active duty, and that internship has been (or will be) completed; and it should be accompanied by a report of physical examination recorded on the Army Form W. D. A. G. O. 63, which may be obtained from any Army station. From the group of Reserve officers placed on extended active duty since August, 1939, over 25% of those within the age requirements of 32 years of age or less for commission in the Regular Army Medical Corps found military service sufficiently to their liking to cause them to take entrance examinations for the Regular Army.

- \* First Corps Area (Maine, N. H., Vt., Mass., R. I., Conn.), Army Base, Boston, 9, Mass.  
 Second Corps Area (New York, New Jersey, Delaware), Governor's Island, New York.  
 Third Corps Area (Pa., Md., Va., D. C.), Post Office and Court House, Baltimore, Md.  
 Fourth Corps Area (N. C., S. C., Ga., Fla., Ala., Tenn., Miss., La.), Post Office Bldg., Atlanta, Ga.  
 Fifth Corps Area (Ohio, W. Va., Ind., Ky.), Fort Hayes, Columbus, Ohio.  
 Sixth Corps Area (Ill., Mich., Wisc.), Post Office Bldg., Chicago, Ill.  
 Seventh Corps Area (Mo., Kans., Ark., Iowa, Nebr., Minn., N. D., S. D.), New Federal Bldg., Omaha, Nebr.  
 Eighth Corps Area (Tex., Okla., Colo., N. M., Ariz.), Fort Sam Houston, San Antonio, Tex.  
 Ninth Corps Area (Wash., Ore., Idaho, Mont., Wyo., Utah, Nev., Calif.), Presidio of San Francisco, San Francisco, Calif.

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Complete literature on Silver Picrate as used in genitourinary and gynecological practice will be mailed on request.

\*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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# The Journal of the Maine Medical Association

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Volume Thirty-one

Portland, Maine, May, 1940

No. 5

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## *Medicine Today\**

By L. P. GERRISH, M. D., Lisbon Falls, Maine

I will touch, briefly, on three phases of medicine.

First: Scientific medicine and its development.

Second: Legislative medicine as it appears to lawmakers.

Third: Medicine: a problem.

Looking back over the years many advances have been made in medicine but the basic principles, like the Rock of Gibraltar, remain and always will remain. At not infrequent intervals, during the course of events, new discoveries have been made which have proved a boon to mankind.

In almost every country the names of medical scientists stand out in bold relief; names to be conjured with; names woven indelibly into the fabric of human life. Add to these the foundations, the hospitals, the schools of medicine scattered world wide, then, in truth, of all these accomplishments we may well feel proud.

In X-ray work and surgery progress has been very rapid and marked as we all know. With each division of medicine dovetailing

and strengthening another, a structure has been reared, let us call it Medicine Today, which is of vital import to our nation and every nation. My point is this: The structure has been built, slowly and surely by and through the efforts of doctors of medicine, M. D.'s, if you please.

Any structure, be it business, government or medicine must carry on in accordance with the law, and if worthy and of honorable intent, should rightfully be entitled to a commensurate coöperation on the part of the lawmakers which would further strengthen the structure in question.

Looking backward over the years, in all States of our Union, it appears that it has been very difficult for lawmakers to create uniform standards in medicine. It is perfectly evident and axiomatic that for all who practice medicine, in the interests of humanity, there should be a uniform standard of requirements, a basic level of medical qualification, and following this a freedom to practice with a fearless mind.

Today there is no national standard and, in many states, there is no standard worthwhile. In our own Pine Tree State standards

\* President's address read at the annual meeting of the Androscoggin County Medical Society, January 21, 1940.



are absurd and Maine is wide open. Who is responsible? In my opinion the lawmakers in the states to a considerable degree and, if we don't watch out, lawmakers in Washington seeking political advantage will control medicine, medical practice, hospitals and will further lower standards. Now lawmakers, as I know them, are for the great part honorable men but they know:

First: Nothing about medicine.

Second: They rarely give medicine a thought.

Third: They think that the M. D.'s operate a monopoly.

Fourth: They are quite concerned over child welfare, public interest, public health and public well being and would like to help, but:

Fifth: As politicians they have a big heart for what they call the underdog.

Sixth: They want everybody to have a fair show—and in my opinion—that's fair.

Seventh: They have a tendency to discredit M. D.'s, but like tolerably well a good medical story and, a *good* medical story in my humble opinion, is about their limit on matters medical: and so, in the States, legislatures of varied hues and colors have failed markedly to strengthen the medical practice acts.

Into the ears of these legislators has fallen propaganda and unwittingly they have become sponsors of changes which, if analyzed carefully, appear vicious.

What is the remedy? Educate the public and that's the problem. The days of making a better mousetrap are now "horse and buggy days." They've "Gone with the Wind" of public misinformation. As generations change we of medicine must change. If Truth is crushed to earth it will rise again and it is only of Truth that I speak. A lady of my acquaintance, about to embark for Honolulu from Los Angeles was put to considerable time and trouble to secure a health certificate from some M. D. This accomplished, she was much disturbed (with more time lost) to find out that it was necessary for her to secure another showing that the doctor who signed

first was a regular M. D. This is a true occurrence and in this anecdote lies the crux of a considerable question. Who's Who in medicine with cults to the right of us and cults to the left of us?

In our society in Androscoggin County there are, we will assume, one hundred well-trained medical men. There are also thousands of people, in all walks of life, to whom a doctor is a doctor whether he be a cultist or an M. D. Cults and cultists (although present down through the centuries as miracle men or soothsayers), cultists, I repeat, have been mushroomed in great numbers on an unsuspecting public. Owing to the suddenness of this cultist thrust, accompanied and made possible by loopholes in the law, to which, as I have stated, lawmakers pay little attention, owing to this sudden onset of cultists, the public is left in a somewhat *confused state* as to what is what, which is which and who is who.

The answer to this confusion, to my mind, is: education of the public. Who should do the educating? My answer is, the County Medical Society should be one source from which the guiding thoughts of an educational program should emanate.

The proponents of socialized medicine depict its possible advantages, cleverly, in the press, on radio and screen. Cults are doing the same thing but the honest-to-goodness M. D., with years of training and experience in the art and practice of medicine, like "Old Man River" he just keeps goin', he just keeps goin' along, and there's nothing said about it.

To be sure, of late, considerable emphasis has been placed on the family doctor and the "old country doctor," but, fortunately or unfortunately, we are not all country doctors,—and very many of us are not even family doctors; we are specialists, clinicians, hospital executives and so on. Now my point is this: In this maelstrom of medical thought, in this chaotic condition of the popular mind, something should be done to reveal to the public the real qualifications of the M. D., and his work, past and present, in the building of American Medicine and how?

In my opinion, each and every County Society should have a very much alive full-

time committee which has to do with medical publicity. In this publicity no names of M. D.'s, nor their individual accomplishments would ever be mentioned. Almost every business in the world is keeping the public informed. You may retort; the public knows all about us. My answer is; *they do not*. Almost every day some person asks me; what is the difference between these *new* doctors and you M. D.'s? This reveals a desire on the part of the public to be educated in this respect. As to the ways in which this might be done you all well know. They are the ordinary ways of the press, radio and screen plus individual incentive to broadcast truth. Never by aspersion nor innuendo but by straightforward facts, brief and to the point, on what the degree of M. D. really means; what medicine has done and is doing and always with emphasis on the M. D. The personnel of all A-1 hospitals is made up of M. D.'s. Practically all M. D.'s have had training and experience in accredited hospitals. Practically all life insurance companies rely upon M. D.'s to conduct their medical examinations. The medical work in State and National institutions is carried on by M. D.'s. State and National Public Health Service is in the hands of M. D.'s, the Army and Navy utilize the services of only M. D.'s, and so on and on, to the end that, by deduction, the public may realize more forcibly that there *is* a difference between these cultist doctors and the *regular* M. D.'s.

Every M. D. should be his own and the society's agent for the dissemination among his patients and the public of plain facts, and plain truths concerning medicine as it is today. The president of one of our largest life insurance companies recently said these words: "We insurance companies have got to coöperate more with the general public outside of our policy holder family. They have questions that interest them. We have means of reaching them, not simply as prospects, but as members of the public—and we must do that, in whatever channels we find fit, but, best of all through the channels of

our own forces." Let me re-read this as it might apply to medicine, substituting M. D. for men of insurance. We M. D.'s have got to coöperate more with the general public outside of our own patients. They have questions that interest them. We have means of reaching them, not as potential patients, but as members of the public and we must do that in whatever channels we find fit, but best of all, through the channels of our medical society. Let me cite one true incident of a few days ago. A detail man was in a small town and, meeting a friend, the following conversation took place: "Have you called to see Dr. Blank? He's a new M. D.," said the friend. "He's not an M. D.," said the drug man. "He certainly is," answered the friend. "How do you know he's an M. D.?" said the drug man. "I saw his sign, 'Physician and Surgeon'," said the friend. Now hospitals, public services, army and navy, state institutions, life insurance companies all well know what M. D. means but the *public*, for the most part, *does not know*.

Medicine from its inception has been an art and a science. M. D.'s, we trust for the most part, have been dignified gentlemen and may they continue such to be, but—let us remind ourselves that medicine is also an industry. What industry, in this day and generation, could successfully carry on with the public ill informed? It should be our province to truly inform in every way possible, not egotistically, but truly, on what M. D. means and what American Medicine is. The public is being daily informed on what M. D. does *not* mean and what "hocus pocus" does mean. Virgil said years ago: "Dame Rumor, than whom no arrow is more swift, steals onward in the night." In these days of groups and clubs, propaganda is being directed at destroying the confidence of the public in American Medicine and at destroying and discrediting the individual M. D. Shall we take action? Shall the County Society take upon itself the problem of public education? Or shall we wrap the draperies of our couch about us and lie down to unpleasant dreams?

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"Tuberculosis is the captain of the men of death."—JOHN BUNYAN.

There is no such thing as a trivial injury in a diabetic.



## *On the Nature of the Neuroses*

By MATTHIAS MARQUARDT, M. D., Augusta State Hospital, Augusta, Maine

Neuroses are aberrations from the so-called normal mental responses to so-called normal demands forced upon the apparently normal human individual by the ever-changing environment. The person suffers from the effects of this aberration and seeks help from the physician. Upon thorough and exhaustive physical examination, however, the physician is unable to find any demonstrable sources for this discomfort. Consequently, it must be assumed that the person examined may be hereditarily, congenitally, or environmentally predisposed to respond to certain more or less definable life situations in a manner differing from that of the average behavior expected by society from approximately normal people. The intellectual control of mood changes, reality appreciation, responsibility evaluation, seems to be in abeyance. The individual factor is greatly enlarged and distorted. Of all the so-called diseases known to medical science the neuroses (and the psychoses) are most closely dependent upon sociological factors. Because of this, patients suffering from mental aberrations of various kinds were diagnosed as sufferers from mental disease or a disease of the mind and were treated as if they possessed primarily negative quantities. That there are positively purposive factors at work could only comparatively recently be discovered by way of the psycho-analytic method of examination. The findings of these examinations of the psychic or unconscious drives or mechanisms of human behavior are extremely interesting, complicated and not verbally expressible, because of the prevailing emotional tone and the employment of symbolisms which are often not comprehensible by the average rational thinker. Consequently, this sphere can here not be entered into, explored and described. However, the general trend of behavior disturbances can be shortly summarized.

The direction of disturbances of behavior usually expresses itself in one of two forms, either by exteriorization or by interiorization of activity. If exteriorization is the mode of expression, the person afflicted lives his or her

wishes to their fulfillment in full view of the world. The expressed activities are sensational, impressive, often terrifying, with exaggeration of the I value, with a tendency toward physical exhaustion. If interiorization is expressive of the symptom complex of behavior, the afflicted person withdraws into the self as into a shell. Self-observation, self-analysis, meditation or brooding becomes routine activity. Every new development, feeling, sensation, is gravely appraised and loaded upon the already heavily burdened Self. This inaction tends to progress to abstinence from all things. Naturally the quality and quantity of sensitivity, receptivity, attention, sensation, and expression in all spheres are correspondingly affected by the progression of the two deep varieties of behavior.

In consequence of these progressive alterations there finally develop various motor disturbances of one or more special organs which may mislead the examining physician into believing that he is dealing with organic lesions or processes. The fact that so-called somatic or bodily symptoms can and do actually appear in the presence of psychic or functional afflictions must always be remembered but carefully and appropriately evaluated. For instance, such emotions as fear and rage may produce or be accompanied by changes in the endocrine, cardio-vascular, and other systems.

When an attempt is made to discuss or describe the pathology of the neuroses, it immediately becomes necessary to first try to envisage the indefinite number of possible conflict condensations that may arise within the individual whenever efforts are made to solve the problems that present themselves during the evolution of the forever newly developing alteration in the person-society-environment relationship.

It will soon be discovered that when the doctor has apparently performed his whole duty by making a scientifically correct diagnosis of the patient's disease symptoms, has prescribed appropriate remedies, has outlined definite regimes and indicated a certain mode

of living, all of this may leave the patient unsatisfied, yes, unprepared to attain desirable restoration into his place in society. The question of social inadequacy and incapacity must become a matter of serious concern to the doctor and he must recognize it as of fundamental significance in designing socio-medical care for many of his patients.

It must of course be understood that neurotic behavior can precede and/or succeed some organic disease. When the physical condition of a rich man is combined with uncertainty, anxiety, inability to work, the need to relinquish his obligations to his family and to his social group, emotional disturbances of one kind or another are bound to occur.

When we venture to speak or write of constitutional etiologic factors, we may consider the presence of traits presented by the patient as a characteristic of the family because further investigations may reveal the presence of similar traits in a long line of family antecedents. Some characteristics may be found to be distinctly characteristic of a particular individual since birth. Again traits may develop during early life in one individual which do not usually develop in the average normally responding person.

When we search for acquired causes and reasons for maladjustment, we must look in the environment for stimuli which may produce it. Now, in order to partly comprehend the multitude of potential sources for maladjustment to and in the environment, it will become apparent that our environment may include almost any conceivable object relationship ranging from macrocosmic to microscopic dimensions, from celestial to terrestrial construction; it may include the inorganic and the organic, living and the dead and those not yet born, not only of the human realm but of the various kingdoms of living and non-living things. Then, too, one environment may be composed of a great many interhuman, social, irritative factors, such as found in life as a free laborer, a slave, an unemployed, an unemployable, an immigrant, a refugee, the response is different in one escaping from justice than in one escaping from persecution of various forms, different in a lawful citizen, a lawless, homeless,

social parasite, a man rich enough to move freely from place to place, a man conscribed, regimented, and never allowed to move anywhere without definite orders, etc., a man belonging to any special form of nationality, religion, political or professional group, or uses any special form of language, and so forth.

After meditation over the indefinite number of possibilities in source material which may lead to a neurosis, we should expect to find it rather difficult to arrive at a satisfactory system of classification. For purposes of convenience in handling the problem, neuroses are most usually divided into two groups. One group is said to contain patients which present the syndromes known in medical literature as the "anxiety" neuroses, neurasthenias, hypochondriases, and sometimes the "traumatic" neuroses. The second group is said to include the "hysterias" and the "psychasthenias," as well as the "obsessive" and "compulsive" neuroses.

The more detailed description of a typical case of any one of these "typical" syndromes is very difficult, perhaps not possible at all if one considers the variety of possibilities of the source material from which a case may develop. The differentiation between the various forms or types probably is not nearly as important as the differentiation between a neurosis and a psychosis, the latter being socially and medicolegally more important because the case under consideration may require immediate temporary or prolonged custodial detention in a hospital for nervous and mental diseases.

In regard to the treatment of the neurotic patient, it can be said that many serious attempts have been made in both the rational and the empiric field of therapy. The treatment of these people seems to be considerably more difficult than is the case in treating a person suffering with a definable or tangible lesion or disease. A person that suffers from the symptoms or syndromes of some form of neuroses does not wish to relinquish more of the syndromes of his form of neurosis than is absolutely necessary to make his life in his immediate environment more comfortable or more endurable. Consequently, only the symptoms are offered for treatment, the cure



from the basic conflict-reactions which lie dormant within the unconscious nature of the patient is more or less stubbornly resisted, consciously and unconsciously.

The most important dictum to be remembered in treating persons suffering from neurotic symptoms is that he who causes no physical, psychic, or spiritual injury to a patient by his efforts at treatment has already done a great deal.

Much has been tried in all fields of medicine, surgery, physio- and hydro-therapy, as well as in all the fields of metaphysical activity of the human mind. Some measure of temporary relief may be obtained by any and all of them. Aggravation following treatment tends to increase in severity rather than lessen with its continuance.

The so-called technical terms one often sees and hears when reference is made to psychoanalytic examination of the patient presumably suffering from a neurosis are such as direct exploration, free association, suggestion; psychoanalysis, has the accompanying features of positive and negative transference depending on whether the patient likes or dislikes this physician-confessor as an interested or disinterested person, or as a doctor, or as a substitute for a father, brother, or any other person of authority which may have played a part in the patient's life during the formative years.

The chief difference between a consultation for a medical or surgical condition and one for some nervous or mental complaint is this: In the ordinary consultation we encourage the patient to tell his own story. The clinician, who is often anxious to clinch the diagnosis of an organic disease, tries to keep his patient to the point and tends to remain indifferent to the psychological tension he thereby produces in both physician as well as patient.

In analytic consultation the patient is permitted to make the first move and while he is getting ready the physician makes useful mental notes from his bearing, mannerisms, behavior in general and in detail, and the manner in which he unfolds his story. Only when it becomes evident that the patient seeking consultation unconsciously repents his courage of having ever rung the door bell and

when it is evident that much condensation, displacement, or secondary elaboration of his statements is being offered, the physician may, with the help of a few leading questions, begin the uncovering of some of the tormenting symptoms, peculiarities or conflicts. Subsequent consultations are usually limited to one hour. Many times parents, friends, etc., may have to be interviewed. At other times they may arrange for consultation in the patient's behalf.

The last phase of the psychoanalytic, now therapeutic approach of a patient usually comes under the collective term "guidance." This depends upon the flexibility and willingness of the patient to follow the path indicated by the physician toward the regaining of self-respect, courage to face new problems, independence of constructive thought and action, the good opinion and confidence of the people who depend on him, and the like.

Since the beginning of this century, psychotherapy has been tried and its promoters and practitioners claim considerable success for the various methods employed. The so-called science of psychotherapy aims to analyze the problems of the patient under treatment and tries to initiate such therapeutic measures as are indicated by the results of the analysis. So-called psycho-analytic investigation chiefly consists of bringing out the person's content of his conflicts. This, of course, can be done only with the patient's consent and in the waking state. The methods of approach differ. The physician may be seated behind the head of a couch upon which the patient rests in complete relaxation. The patient is expected to produce from memory, dreams, inspiration, stimulation, to respond to certain so-called key words offered by the physician, answer to questions of direct exploration, or to give expression to any thought whatever that comes into his mind. The trained physician is expected to accumulate all of these productions, interpret and evaluate them and direct the activities of the patient in such a way that he may gain comfort and peace from the thoughts which torture him obsessively, impulsively, or compulsively. During these analytic seances the physician hopes to learn the patient's attitude toward his problems, the state of preservation

of his personality traits, his social setting, his grasp on his relationship to this setting, his emotional contacts and emotional insight or understanding. The patient hopes to attain the removal of the causative factors, rehabilitation in his social sphere, and emancipation from the tyranny of his conflict situational behavior.

The more usual and more practicable method of investigation and one that is open to every patiently-listening physician is the systematic, direct inquiry. The method does not require the learning of new terms or methods. The physician who has learned to take his anamnesis painstakingly and patiently, to listen to everything the patient has to tell or confess and by experience has learned to evaluate meanings as presented by the patient and meanings received by the physician, rarely fails in accomplishing a great deal.

As neither the outlines commonly recommended for the elicitation of physical diseases nor those employed for the detection of emotional instability or mental aberration are satisfactory whenever the physician tries to probe for the probable and possible basic causes for the development of each neurosis, it has been suggested that a so-called psychosomatic type of a history be obtained. Here, in casual conversation, careful questioning, attentive listening, the patient's characteristic make-up is elicited. One tries to discover as much as possible of the patient's early reactions, physically and mentally, to his family, his work, his social environments, which must also include his early hobbies, friends, church experiences, economic state variations; then his various attachments to persons of the same sex and the sex opposite to his; then, too, everything concerning noteworthy experiences during various sicknesses in the past must be discovered. Following this introduction one tries to learn something of the patient's way of getting ready for the present illness. Here one tries to discover as much as possible the various conflict situations which preceded or succeeded attempts at adjustment or re-adjustment. One tries to learn of alterations of constitution of body form and function, of possible hereditary or

pseudo-hereditary direct or indirect information which may have been recently acquired and may have produced a change in point of view. We then try to get as many data as we can concerning chronological correlations of first conscious appearance of conflict situations, emotional stresses and strains, traumatic events of physical, psychic, or spiritual (metaphysical) nature. Incidentally, we will learn during such an interrogation when the first symptoms of defense against conflict appeared in consciousness, when as visible irregularity, when the patient began to suffer from such exteriorized expression of internal conflict. It is further necessary to collect and retain whatever material can be obtained concerning the patient's insight into his difficulties, his amnesias, and his unconscious operations as talking, singing, writing, walking, etc., in the unconscious state or in sleep.

The course and prognosis of the neuroses depend to a large extent upon the causes and the possibility of removing or altering them. Since neuroses in general depend for their causation largely upon environmental factors, course and prognosis tend to do likewise. The disappearance of symptoms of a neurosis cannot be considered as a cure of the underlying causes. A careful and patient study of what appear to be the constitutional or fixed traits may enable the physician to judge about how far he may expect readjustment to progress. Likewise, when the environment in which the neurosis was produced cannot be altered, the outlook for complete recovery is very doubtful. In such matters an intelligent patient can often, with good insight, see much further than his physician.

Naturally every patient who visits his personal physician expects to receive from him some form of tangible evidence of his willingness and ability to help. Consequently, no patient wishes to be taken lightly. He or she seriously resents being sent away with a remark like "There is nothing the matter with you," unless it is made at the termination of an examination for life insurance. The patient suffers, and suffers keenly from whatever symptoms he exposes for the physician to perceive with his senses or his instruments. The patient expects his physician to know



## Cardiac Emergencies and Their Treatment\*

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The subject of my lecture tonight is perhaps not new for the most of those present, however, I thought the subject would be of sufficient importance that you might all perhaps wish to know how we attempt to treat such emergencies and to know the physiological bases of our therapy in these cases.

One is so frequently struck with the fact that there still is, in these days of marked advances in our knowledge of the circulation, so much confusion among the student and medical circles about the treatment of such disturbances. A proper conception of the physiological bases of these upsets is therefore very important when one has to consider the mode of treatment to pursue.

This evening it is my purpose to present to you some of the more important factors which precipitate acute cardiac emergencies and to outline some of the more common methods of treatment based upon our present day knowledge of the underlying disturbance of the normal physiology. For purposes of convenience and of classification of the subject, I have divided the matter into two groups. *Firstly* those conditions of the heart which may be grouped under the heading of acute cardiac failure which leads to circulatory collapse and *secondly* those acute disturbances of heart rhythm which, while not necessarily leading to circulatory collapse, are in themselves emergencies.

First the acute cardiac and circulatory failure cases—These may be due to several independent factors or combinations of factors and constitute the greater number of cardiac emergencies which one is called upon to treat. Under this heading come those cases in which there is (1) an interference in the coronary blood flow and to enumerate these, we have coronary artery occlusion, coronary artery thrombosis and coronary artery emboli and those cases which present an inflammation of the coronary arteries, i. e., rheumatic, leuetic and typhoidal forms of endarteritis. Then (2) we have the cases in which myo-

cardial anoxemia plays a dominant role; these may be the result of a general systemic anaemia (primary or secondary, i. e., pernicious anaemia or leukemia), bacteriemia causing anaemia, hemorrhage or blood loss; anoxemia during anaesthesia; high altitudes; acute or chronic pulmonary diseases; sudden lowering of the general systemic blood pressure, i. e., in spinal, avertin and chloroform anaesthesias and in the severe anoxemia which follows pulmonary artery thrombosis. Finally in those cases which present the picture of surgical shock in which peripheral blood stasis occurs and to enumerate we may have ruptured abdominal viscera, head injuries, extensive burns and poisons such as the inhalation of carbon monoxide gas. (3) The cases of myocardial toxemia also produce rapidly the symptoms and signs of acute heart failure and under this heading we have hyperthyroidism and the effect of certain drugs, i. e., pituitrin used to control hemorrhage from the uterus and gaseous distension of the stomach and intestines, emetin for the treatment of amoebic dysentery, digitalis and quinidine while being used to treat cases of cardiac congestive failure may at times precipitate acute emergencies as far as the heart is concerned, i. e., auricular fibrillation, ventricular tachycardia, heart-block and cessation of heart action. Here one should mention the effects of adrenaline and ephedrine which may be administered to cases of collapse of the circulation and these in turn may frequently precipitate a very acute disturbance of the heart's action.

There are very definite symptoms and signs which signalize the onset of an acute circulatory or congestive failure and these are common to all cases irrespective of the factors causing the myocardial inefficiency.

The individual who presents this circulatory collapse usually complains of shortness of breath (dyspnoea) at rest or during exertion, palpitation or consciousness of his heart action, cough, sleeplessness and an inability

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to lie flat in bed (orthopnoea); precordial or left-sided chest pain or referred pains into the left or right arms or both, pains radiating into the neck or along the lower jaw or to the epigastric area or abdomen; even into the lower quadrants of the abdomen or scrotum.

The physical signs of circulatory failure are also common to all of these various conditions which precipitate it and consist usually of an increase of heart and pulse rates, increase of respiratory rate, pallor, cyanosis and cold clammy perspiration, elevation of the venous pressure and an alteration usually lowering of the systemic arterial pressure and a decrease of pulse pressure. The lungs may present some evidence of impaired or restricted motility, there may be alterations in the resonance of the lungs on percussion; harsh broncho-vesicular breath sounds with alveolar and bronchial moist rales and rhonchi. Increase in the transverse diameter of the heart, particularly to the right but also sometimes to the left; change in the character of the sounds of the heart particularly the quality of the first heart sound which becomes less snapping and of a definitely softer quality, the development of a triple heart sound (gallop rhythm) and accentuation of the pulmonic second sound, the development of an apical, mitral or tricuspid systolic murmur which is due to a relative dilatation of the mitral and tricuspid valve rings respectively.

The abdomen frequently becomes distended accompanied by (1) engorgement and swelling of the liver which on palpation will be found quite tender and sensitive and there may be some upper abdominal muscular splinting. (2) Engorgement of the entire gastro-intestinal tract with blood which will result in gaseous distension of the stomach, small and large intestines. As this engorgement of the liver and abdominal viscera continues one may even be able to demonstrate the presence of free fluid (ascites) in the peritoneal cavity.

The volume of urine will be decreased and there may even be anuria during the acute collapse. The urine itself appears quite concentrated, dark in colour even smoky and hemorrhagic, with usually a high specific gravity and on microscopic examination it

may show red blood cells and casts; albumin in varying quantities can also be demonstrated.

The above symptoms and signs of acute circulatory failure indicate in a general way cardiac inefficiency. It is desirable frequently to differentiate the signs of failure of the right and of the left hearts respectively. The differentiation between these two definite forms of heart failure has been made possible by our present day knowledge of the sudden disturbances in the circulation which occur in the individual right and left heart chambers which we now recognize in those individuals who are the subjects of coronary artery occlusions or thrombosis. However, one must not be too dogmatic in stating that these differences are all so simple and so well defined. Many cases which one is called upon to treat may present signs in which both the right and left sides participate and in these one must infer that the heart as a whole, and by that I mean the myocardium of both sides, has become involved.

The findings, which are perhaps more characteristic of right heart failure, are cyanosis, elevation of the venous blood pressure, dilatation of the right border of the heart, enlargement and engorgement of the liver with the early development of ascites and peripheral oedema.

The signs of left heart failure consist of early congestion of the pulmonary vascular system, marked accentuation of the pulmonary second sound at the base of the heart, marked dyspnoea without early cyanosis but with pallor, cough with or without expectoration and a very sudden fall in the systemic blood pressure which may be preceded by a short period of elevation.

Let us now for a few moments consider what is the basic upset in the physiology of the general circulation which brings about this acute state of circulatory failure. We have been speaking of those conditions which customarily cause an upset in the myocardium itself and if we analyse these we shall find that there are several common important factors which bring this about.

Basically then one finds that a localized anoxic state of the heart muscle itself or a general systemic state of anoxemia will pre-



precipitate an acute circulatory failure. Proper oxygenation of the heart muscle is at all times an essential factor in the preservation of an efficient circulation.

A poorly functioning heart muscle, however produced, will create certain other disturbances in the general circulation. A smaller stroke volume from either ventricle will result, which in turn will cause a drop in the general systolic blood pressure and create a poor coronary artery blood flow and this will tend to create a stasis in the right side of the heart, thereby giving rise to a rapid accumulation of blood in the venous radicles. Engorgement and distension of the venous channels will then result. This stasis on the venous side of the general circulation will cause many of the physical signs which we have already mentioned, i. e., cyanosis, engorged veins, pulmonary stasis and oedema, engorgement and swelling of the liver, peripheral oedema, etc. On the other hand a failure of the left side of the heart will give rise to an acute engorgement of the pulmonary vessels with a burden placed upon the right side of the heart and in this one will find dyspnoea and cough.

The second type of case which constitutes a cardiac emergency is that showing an acute disturbance of rate or rhythm. These either cause the heart to beat more rapidly, irregularly or produce such symptoms as will affect very acutely the individual's general circulatory efficiency.

The arrhythmias which commonly create such disorders are:

- (1) Auricular fibrillation (rapid form or paroxysmal form).
- (2) Auricular flutter.
- (3) Paroxysmal tachycardia (auricular, nodal or ventricular form).
- (4) Complete heart-block which suddenly develops in a case showing a previous partial block (Stokes Adams attacks).
- (5) Isolated or grouped auricular or ventricular extrasystoles.

These several arrhythmias require a little explanation, as to the mode of their development, and their effect on the general circulation.

Auricular fibrillation and flutter for convenience may be classed together, because each of these represents a disturbance within the auricular myocardium which results in a complete loss of all co-ordination of auricular activity and in each of these there is developed a rapid impulse wave which in the case of fibrillation circulates in a very varying course throughout the auricular myocardium and in the case of flutter proceeds in a more constant and uniform path. Both of these arrhythmias then establish a certain degree of stasis within the auricles and they do not empty as completely into the ventricles as when the regular pacemaker control exists. This results in a dilatation of the auricular cavities. At the same time there is an irregular and sometimes regular impulse leaving the auricles to pass into the A-V node and thereby to initiate the ventricular contractions. This gives rise to a very rapid regular or irregular ventricular response which results in a variable volume of blood leaving either ventricle with each systole.

As a result of both auricular flutter and fibrillation we find a variable pulse. It may be rapid or slow, regular or irregular there will be a varying pulse volume and tension. This in turn causes the symptoms of palpitation, breathlessness, fatigue and dizziness and even faintness and collapse.

Paroxysmal tachycardia is another form of cardiac arrhythmia which frequently causes an acute emergency. This type of heart arrhythmia can be either auricular, nodal or ventricular (right or left) in origin and is best diagnosed and appraised by the abruptness of onset and offset of each individual attack. Heart rates during these attacks may be recorded at 150 to 210 or more beats per minute and as far as clinical evidence goes the heart action is regular. It has been pointed out by several observers that the rhythm in the case of ventricular paroxysms is slightly irregular and that in the case of those of auricular origin it is perfectly regular. This is very difficult to appraise at the bedside but may be demonstrable on the electrocardiograms.

In these cases of paroxysmal tachycardia one frequently is able to elicit the story that between attacks the heart rhythm is usually

regular, but that from time to time there may be a consciousness of a periodic and isolated form of arrhythmia due to the presence of isolated or grouped premature beats (extrasystoles). These isolated irregularly placed extrasystoles can usually be shown to be of the same form as are those of the actual paroxysm and come from the same chambers of the heart. Paroxysmal tachycardia then may be regarded as a condition in which the extrasystolic form controls the rhythm.

This form of arrhythmia disturbs the general circulation first by the fact that the heart's action is so rapid, that the time of diastolic filling of the chambers is so short, that the stroke volume from the ventricles becomes very small and secondly on account of the rapid rate, cause a very rapid fatigue of the heart muscle with frequently the occurrence of an acute dilatation of the heart chambers and sometimes favours the development of congestive failure. This latter condition will only follow if the myocardium is already diseased before the paroxysms occur.

The clinical symptoms referable to cases of paroxysmal tachycardia are a sense of fluttering within the chest, marked palpitation, pallor, faintness and dizziness, sometimes dyspnoea; a sense of fullness within the chest and even substernal or precordial pains.

Finally I would mention the condition known as complete heart-block. Here one usually finds a very slow heart or pulse rate which is perfectly regular in rhythm. The usual heart or pulse rates in these cases of complete heart-block are commonly below 50 beats per minute but not very uncommon are rates of 70-80 per minute and I have recorded cases of complete block in which the ventricle beat at 96 per minute. Once this degree or grade of block has become completely established there are very few symptoms complained of by the individual. You will notice, however, that in those cases who show a very slow heart rate below 50 beats per minute, that their activities are often slow and deliberate as are their mental processes. They move about and talk and think slowly and deliberately. In fact they may even appear more like cases of severe grades of hypothyroidism. They may tell you that they have found they are unable to hurry

about their daily duties as they had done before. Some will complain of easily induced giddiness or a sense of faintness if they change posture too rapidly and may complain of a sense of fullness in the precordial or substernal areas with a sense of breathlessness on exerting themselves unduly.

The physical findings in cases which present a complete auriculo-ventricular dissociation (block) are not numerous, i. e., a slow or normal regular heart action, with well developed heart sounds and frequently with an accentuation of the second sound over the base and particularly over the aortic area. One may hear the auricular contraction sound and this will be interspersed irregularly between the regular ventricular sounds and sometimes superimposed upon the ventricular sounds in which case the ventricular sounds will become much louder and booming in character. Quite typical of cases showing a complete heart-block are the blood pressure findings; there is usually an elevated systolic pressure and a lowered diastolic pressure. This will result in an increase of the pulse pressure and in turn one may have a collapsing character displayed not unlike that found in cases of aortic regurgitation.

There are no acute cardiac emergencies in cases presenting complete heart-block, but there are in those who have a change of rhythm from a partial to a completely blocked state. In these there is usually a period of complete ventricular standstill which causes the individual to collapse and faint suddenly; become very pale and waxy in appearance and if the standstill persists for some minutes there will result a definite general body convulsion.

#### TREATMENT

The treatment of all of these cardiac emergencies consists primarily in an accurate understanding of the normal physiology of the circulation. Knowing this we are better able to recognize the pathological variations which one finds and then we can prepare to relieve and assist the circulation wherever it may be required.

In the case of those individuals who show signs of an acute circulatory failure, we recognize the increased heart rate, the dyspnoea, cyanosis, cough, elevated or lowered



blood pressure, the distended and swollen venous channels, i. e., jugular veins and ante-cubital and forearm veins when these are observed above the level of the base of the heart, the dilated right border of the heart and the tender and enlarged swollen edge of the liver below the costal margin. All of these physical signs indicate a failure of the heart muscle to propel the blood forward into the aorta and arteries and this results in an overloading of the right heart chambers and a general stasis in all of the venous channels in the body.

The first consideration then should be to unload quickly the venous radicles in order to relieve the burden of the heart particularly the right-sided chambers. This is done by a prompt venous aspiration of blood; it may only be necessary to remove 100-300 c.c. of blood before one will notice a striking improvement in the individual's condition. At this point I should like to emphasize the importance of noting the general blood pressure in the patient before attempting to remove any blood and if the pressure be low, namely, at or below 100 m.m. Hg., I would hesitate to withdraw any blood. This is quite important to observe because by removing several hundred c.c.'s of blood you will only further reduce the general systemic arterial pressure which will result in a poorer coronary artery pressure and the myocardial function will only be further impaired.

Individuals in a state of acute circulatory failure have an extremely distressed type of breathing and usually a severe productive or unproductive cough, are apprehensive and anxious, restless and thrashing about the bed and complain of a severe substernal or precordial sense of weight, oppression or actual pain. This should always be arrested by giving a  $\frac{1}{4}$  or  $\frac{1}{2}$  grain of morphine, hypodermically. If there is a known sensitivity or idiosyncrasy to this drug then one should substitute a  $\frac{1}{2}$  to 1 c.c. of Pantopon, as this will not so readily cause the nausea and vomiting which morphine itself produces. Dilaudid may also be given in place of morphine or Pantopon as it rarely upsets the stomach. Morphine or other opium derivatives must be given somewhat cautiously, because in the presence of very marked and

deepened cyanosis the respiratory center may suddenly fail under its influence. Caution then in the use of morphine in deeply cyanosed individuals must be taken and if one is anxious then give the smaller dose to begin with and wait to note its effect before repeating the dose. Morphine or other opium is the *only drug* to relax and relieve the individual of his apprehension and anxiety, relieve the dyspnoea and abate the cough and also relieve the precordial distress or pain. It is really one of the specific forms of therapy that we possess.

The use of Atropine along with morphine in these cases has been too commonly advocated in the past and personally, I feel it has no place in the treatment of acute circulatory failure. If you recall what the therapeutic or pharmacological action of Atropine is you will perhaps grasp the reasons for its omission. Atropine, it is claimed, tends to dry up the secretions of the mouth and throat and bronchi and for this sole reason it has been used but if you stop to understand its true action, you will realize that not only may it do this, but at the same time it will paralyze the vagal nerve endings in the heart and this in turn will promote a more rapid heart action. Increase in the heart rate is what one attempts to avoid.

I have already spoken of the cyanosis which occurs in these cases of acute failure. The lack of proper oxygenation of the blood is due primarily to the congestion and oedema within the alveolar spaces of the lungs themselves and also to the general increase in the venous pressure throughout the body where the blood flow becomes so extremely slow that a more complete removal of the oxygen carried by the blood takes place. This general depletion of the oxygen in the circulating blood causes in itself a very definite effect upon the heart muscle as well as the other tissues of the body. The myocardium and brain suffer and as a result the efficiency of both becomes rapidly affected and the circulation rapidly fails.

Oxygen then is of very great value in the treatment of all of these cases of acute circulatory failure and may be administered through a mask, nasal tube or proper oxygen tent. The latter is much the more satisfac-

tory way in giving oxygen and the tent is ever so much less disturbing and annoying to the patient.

All of these cases of acute congestive failure at the onset show a definite degree of shock in that the surface of the body is cold and it is bathed in a very profuse drenching cold perspiration. This state indicates a very slow circulation through the skin generally and in order to combat this one should surround the body with dry, warm, light bed-clothing, with hot-water bottles or electric pads. Heat will tend to promote a more rapid circulation through the skin and other superficial vessels and will aid the return of venous blood to the right side of the heart.

These individuals in a state of an acute circulatory collapse complain frequently of great thirst. This desire for fluids is due to the great loss of water from the body by the profuse perspirations, the rapid loss of fluid in the rapid respirations and the generalized oedema which rapidly develops in most of the organs and tissues of the body. It is not desirable to replace this fluid too quickly as the more fluid given by mouth or perhaps one may say by vein, the greater will be the increase of the quantity of circulating fluids and at the beginning I have tried to show the importance of relieving the congestion by venapuncture. Small amounts of fluid may be permitted by mouth to appease this desire to quench the thirst, but a restriction to 800 or 1000 c.c.'s in the 24-hour period for a few days following the attack is quite sufficient. There is a great temptation to increase the general systemic blood pressure level in these cases by giving an intravenous injection of saline or glucose. This is contraindicated in the great majority of cases because our whole therapy is directed towards lessening the amount of work the heart has to perform and by giving intravenous injections of fluid we only defeat this purpose. In cases, however, of surgical shock and in those in which a great blood loss or anaemia is found one must give either fluid or blood in order to increase the amount of circulating fluid and raise the general arterial pressure but in giving these one must make the injection very slowly in order that too sudden a load may not be thrown upon the already fatigued or weakened myocardium.

Just as there seems to be a great temptation to give fluids in these acute cases, so also, there appears to be a greater urge to administer drugs of all types. The heart stimulants commonly prescribed are of course, Digitalis and its derivatives, stimulants of the circulation such as Caffeine, Strychnine, Adrenaline and more recently Coramine are sometimes freely used. Again you must recall what has actually happened in these cases which present the signs of an acute circulatory failure before even considering the use of any of these medications. Remember that the heart and circulation have been suddenly insulted and that to readjust they are already laboring and have become overburdened. You do not wish to increase in any way the work done by the heart muscle and therefore, you should not consider using any form of therapy that will increase or stimulate it to greater efforts. Leave well enough alone, promote rest in the burdened and damaged heart, peace and relaxation of mind and body should be sought and above all hesitate to administer any stimulant either directed to the heart itself, the nervous system or the circulatory apparatus. If you remember this you will have accomplished much in the way of helping to restore the already greatly taxed circulation within the body.

Before closing I must mention the methods now employed in treating those cardiac emergencies which are created by acute disturbances in the heart's rhythm.

I have spoken of auricular fibrillation and flutter and both of these may occur in acute paroxysms or more permanent forms. In the care of fibrillation of the paroxysmal type we usually administer Quinidine Sulphate in doses of three grains, three to six times in the 24 hours and this may be continued for several days until the regular rhythm is restored. If regular rhythm is not restored then Digitalis should be administered, but only after 24 or 48 hours have elapsed after the Quinidine has been stopped. Quinidine and Digitalis administered together may cause a very serious disturbance within the heart, namely, ventricular fibrillation which may end in death. Fibrillation of the auricles when this is permanently established is treated always with Digitalis and sufficient quantities are



## *One Thousand Tuberculin Tests with Purified Protein Derivative*

By EDWARD A. GRECO, M. D., F. A. C. P., and MARY G. GORDON, R. N., M. T.

From January 15, 1935, to October 11, 1938, one thousand consecutive tuberculin tests were done at the Children's Hospital. All admissions are tested routinely in this institution. The tuberculin used was the purified protein derivative as described by Florence B. Seibert. The intradermal method was employed, of course. When testing was negative with the first strength (.00002 mg.), the second strength was used (.005 mg.). All positive reactors received chest X-rays.

This group of cases is offered as a nucleus for further reports. No attempt has been made to establish any conclusions. It is hoped, therefore, that many new surveys will be published on testing with purified protein derivative. The superiority of this material is unquestioned. The product is sponsored by the Committee on Medical Research of the National Tuberculosis Association. Old tuberculin varies so much in its method of production and consequently its virulence that there is no seeming uniformity of strength in different localities; because of this, it was felt by many that figures recording the instances of tuberculous infection in different parts of the country did not permit of comparison.

The one disadvantage of cost of purified protein derivative has been markedly discounted because of the low price to institutions doing group testings. The specificity of this material and the elimination of the undesirable effects of the fat and sugar fractions of the tubercle mycobacterium outweigh the disadvantage of cost.

So far as it is known to the authors, this is the first published group of figures regarding purified protein derivative in Maine. There were 9.5% positive reactors. This is a little lower perhaps than expected because we were dealing with a lower average age group. All the more reason that reports should come in from clinics employing purified protein derivative in older patients. There were fifty-three reactors on the first strength and forty-two individuals showed definitely positive on the second strength, making a total of ninety-five reactors. This shows, too, the importance of using the stronger solutions, for it is to be seen that forty-two more children were "screened out" by repeating the tests with the second strength purified protein derivative. All the patients were residents of Maine and all the sixteen counties of the State were represented, Cumberland County having the largest representation and Hancock and Piscataquis the lowest. In thirty of these cases there was a definite history of contact with tuberculosis. This leaves sixty positive cases in whom no history of contact could be determined. This showed that not all cases are infected in the home. There were thirty-five cases that had osseous tuberculosis proven by X-ray (Children's has a large orthopedic service). Five cases had definite active pulmonary tuberculosis (reinfection type).

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Since the writing of this report, Dr. Seibert has further purified protein derivative, and it is expected that the new product will soon be available commercially.

ONE THOUSAND TUBERCULIN TESTS WITH PURIFIED PROTEIN DERIVATIVE

Counties	Positive	Positive History	Age	Osseous Tuberculosis As Shown by X-ray	Pulmonary Tuberculosis Reinfection Type
Androscoggin 20	95	131	Average	30	5
Aroostook 106	or	or	Six Years	or	or
Cumberland 571	9.5%	13%		3%	.5%
Franklin 12					
Hancock 4					
Kennebec 38					
Knox 32					
Lincoln 15					
Oxford 23					
Penobscot 9					
Piscataquis 4					
Sagadahoc 23					
Somerset 11					
Waldo 5					
Washington 11					
York 106					
1,000					

G. R. Brow—Continued from page 127

given to bring the apex or heart rate to between 70 and 80 beats per minute.

Auricular flutter is treated both in the acute paroxysmal and permanent forms with Digitalis and with this drug we attempt to slow the heart rate to between 70 and 80 beats per minute. Frequently and even more commonly the fluttering auricle will revert to a condition of fibrillation under the influence of Digitalis and if you stop the drug at this point, in about 60-65% of the cases regular rhythm will be restored as the drug effect wears off. After the regular pacemaker takes over the control one may prescribe Quinidine in these cases to prevent a return of the auricular flutter.

Paroxysmal tachycardia both of the auricular and ventricular forms is more commonly treated with Quinidine Sulphate and in this form of arrhythmia we usually prescribe large doses of the drug in the 24-hour period, i. e., 9-36 grains. Mecholin intravenously in auricular paroxysmal tachycardia, vagal pressure and pressure over the eye-balls may also be attempted in these cases and in many it may be sufficient to break the rhythm and restore the normal pacemaker control. Sedatives, i. e., Phenobarbital, Morphine, Bromides, etc., may be employed and inquiry

into the use of coffee, tea, tobacco, alcohol may also be made as these beverages and stimulants may play an important factor in initiating these paroxysms. Menstrual arrhythmia may be a possible underlying cause and correction of same with Emmenin will frequently lessen the incidence of attacks.

Acute emergencies frequently arise in cases of partial heart-block (A-V block) when the block becomes complete and there results a complete dissociation between the events occurring in the auricles and those which take place in the ventricles. When this occurs there may be a complete standstill of the ventricles before it will initiate its own ectopic pacemaker. This will result in what we call a Stokes-Adams attack which may manifest itself in a general convulsion with loss of consciousness in the individual. These attacks and seizures require very careful appraisal before instituting any therapy. The more common drugs used in these cases are Adreneline or Ephedrine, Barium Sulphate or Caffeine and their action is one which stimulates and excites the ventricle to activity. In some cases showing these attacks it may be necessary to inject these drugs directly into the heart itself right through the chest wall.



## *The President's Page*

*To the Members of the Maine Medical Association:*

Each month on this page the President of our Association writes a message for the good and interest of the organization. At the Fall Clinical Session in Waterville, the President asked the President-elect to prepare the page for May, 1940. Therefore, the different signature at the bottom of the page doesn't indicate any illness, indisposition or idleness on the part of Doctor Pratt, but rather a desire to give the incoming President an opportunity to write something for the consideration of the members.

In the first place, the President-elect thanks everyone for intrusting him with the responsibilities of the President's office. In the second place, he asks everyone to give serious thought to the plans and proposals which are brought forward from time to time to change the practice of medicine in one way or another. As time goes on, more suggestions, and new plans will give all of us food for thought and discussion.

The County Medical Society seems the right and proper body to discuss them. Therefore the President-elect would like to have every qualified Doctor of Medicine in the State of Maine an active, paid-up member of his County Society. And he would like to have each County Society continue to select for Secretary, a devoted member, who is willing and eager to work and work hard for the interest of organized medicine. Furthermore, he would be pleased to have each Society elect with thought and care as delegates to the House of Delegates, members who would make every effort to attend regularly and participate in the deliberations. And in conclusion, he would be grateful to all Committees which hold their meetings and forward their reports to the Secretary of the State Association on or before the due date.

Doubtless all incoming Presidents have cherished similar thoughts and the present one realizes the many demands on the practicing physician's time but he also realizes that the physicians are living in a changing era and that strong, sound organization is essential for expression of their considered opinion.

THOMAS A. FOSTER, M. D.,  
*President-elect, Maine Medical Association*

## Editorial

### *Maternal Welfare in Maine*

The maternal welfare campaign conducted in Maine for the last five years is apparently bearing fruit by awakening physicians to their responsibility and increasing their knowledge of proper procedures in obstetrics. Greater availability of hospital facilities and the consequent greater number of patients receiving hospital care undoubtedly has influenced the mortality rate, and it is possible that the work of the Maine Medical Association committee on maternal welfare may have played a small part through its educational efforts. The establishment of prenatal and pediatric clinics should also receive credit, and will probably be of greater value as their facilities are more fully utilized.

Recent figures released by the Vital Statistics Department of the United States Bureau of the Census show a gratifying decrease in maternal mortality during the last ten years for the United States as a whole, and incidentally for Maine. Infant deaths under one year of age in this state have also decreased materially, but those under one day have shown no appreciable change.

In 1931, when the preliminary survey in Maine was instituted, the number of maternal deaths (due to obstetrical causes) was 128, a death rate of 7.9 per thousand live births; in 1938, the last year for which complete figures are available, there were 70 maternal deaths, a rate of 4.6 per thousand live births. The number of deliveries has remained practically the same for each year of the period. In 1931, 28% of the deaths in Maine were due to toxemia, 15% to sepsis and 13% to hemorrhage; in 1938, 17% were due to toxemia, 28% to sepsis and 15% to hemorrhage. These percentages are interesting, as showing a reversal in the number of deaths due respectively to toxemia and sepsis. For the first time in ten years the number of deaths from toxemia has been less than those from infection. This indicates that better prenatal care is being given patients, and that both patients and physicians are more aware of its necessity. If the deaths

from infection had been reduced in proportion to those from toxemia, fifteen lives of mothers would have been saved in 1938, and the maternal death rate for Maine would have been only 3.3 per thousand live births, well below the average figure for the United States.

This is a responsibility which is distinctly up to the medical profession, as the majority of deaths from infection are preventable, with proper delivery technique and after-care. Even though statistics may not be wholly reliable, the improvement already shown proves that better work is being done in obstetrics, and should be an incentive to greater effort on the part of all concerned to make childbirth a safe event for the mothers of Maine.

The Committee on Maternal Welfare of your association has the generous and enthusiastic support of the State Bureau of Health, and can promise aid in the way of instruction, establishment of prenatal clinics, consultation service, and any other assistance within its power, when requested by a county medical society or any responsible group of medical men. A Demonstration Area in the vicinity of Waterville is now functioning under the direction of the State Bureau of Health. It provides aid to physicians in the care of indigent cases, furnishing prenatal care, nursing assistance in delivery in the home, hospitalization if necessary, and consultation if requested, the case remaining wholly in the hands of the family physician, who, in certain cases, may even receive partial compensation for his services. This assistance is rendered only upon request of the attending physician, and is in no way intended to apply to patients who are able to pay for adequate medical care. Physicians in the ten towns where this service is available have made use of it and apparently find it helpful to them and to their indigent patients. If it proves as beneficial as preliminary reports indicate, it is hoped that other areas in the state which lack public clinics



may be provided with the same sort of service. Such projects are approved by the American Committee on Maternal Welfare, and are not in any sense of the word an encroachment of so-called "state medicine" upon the rights and privileges of private practice.

Certainly, in the nation-wide effort to re-

duce maternal and infant mortality, Maine should play her part, and each individual physician should do all in his power to improve his own standard of obstetrical care, and to give his patients that degree of skill and competent attention to which they are entitled.

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## *Revised Wagner George Hospital Bill*

Copy of telegram received April 24, 1940, from Olin West, M. D., Secretary of the American Medical Association.

Maine Medical Association  
Frederick R. Carter  
22 Arsenal Street, Portland, Me.

Senate Committee on Education and Labor will submit revised Wagner George Hospital Bill today. Am informed that several suggestions for amendment to original Bill proposed by Representatives of American Medical Association and National Hospital Associations are included in revised Bill. Will send copy of new Bill as soon as Official Copies are available. (Signed) Olin West

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### *Matthias Marquardt—Continued from page 121*

what ails him and how to relieve his discomfort preferably with tangible or understandable means or method. Therefore, the successful doctor who does not hesitate to include patients suffering with neurosis among his clientele will receive considerable enjoyment from dealing with these people. He will learn to understand them and will not ever knowingly send them away less satisfied than they came. Medical practice is all-inclusive; as a science it is privileged to draw from all sciences, as an art it enjoys the freedom to

make use of all tools which may offer fair promise to make human life more endurable and more worthwhile to the individual and to the community. The successful physician may and often does draw from all three of the great realms, namely the physical, the psychic, and the spiritual. Man moves in all three and all find expression in man. The physician of man knows that each sphere offers much that is good and he learns by experience what is best in his hands for each of his patients.

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A recent study of 14 general hospitals in New York State where a routine chest X-ray was made on all cases admitted, showed 1.2% of 4,000 patients to have significant lesions and 0.7% of adult admissions were found to have hitherto unsuspected active tuberculosis. If the same condition prevails generally, it means that 45,000 unrecognized cases of tuberculosis were admitted to general hospitals during 1937. — WHITNEY, J., *Amer. Rev. of Tuberc.*, Aug., 1939.

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It has been shown frequently that physicians treat their own dyspeptic difficulties too lightly. After the age of 45 years such symptoms should be evaluated with meticulous care and this should include roentgenologic investigation. Physicians should apply the same principles to their patients who have chronic complaints that relate to the stomach. —ANDREW B. RIVERS, M. D., *Jour. A. M. A.*, September 23, 1939.

## County News and Notes

### Cumberland

A clinic and dinner meeting of the Cumberland County Medical Society was held Thursday, April 25, 1940, at Portland Maine.

The following cases were presented at the Clinic at the Maine General Hospital at 4.45 P. M.:

Endometriosis of Fallopian Tube—C. E. Dunham, M. D.

Vitamin Deficiency (B)—D. H. Daniels, M. D.

Hepatic Cirrhosis and Vitamin B Deficiency—E. R. Blaisdell, M. D.

Vitamin Deficiency (B)—E. H. Drake, M. D.

Diverticulum of Stomach—G. A. Tibbetts, M. D.

Reconstructive Operations in a Case of Poliomyelitis—H. W. Lamb, M. D.

Demonstration from the Laboratory Staff—Mortimer Warren, M. D., and J. E. Porter, M. D.

Unexplained Temperature in Infant Mastoiditis—C. H. Gordon, M. D.

Pemphigus—Leon Babalian, M. D.

Demonstration of Vital Capacity Apparatus—E. A. Greco, M. D.

Dinner at the Lafayette Hotel at 7.00 P. M. was followed by a business meeting and the evening program.

Joseph E. Porter, M. D., of Portland, was elected to membership.

A letter from the State Commander of the American Legion to the President of the Maine Medical Association was read and discussed.

The National Physicians' Committee was discussed.

Stephen A. Cobb, M. D., Councilor for this District, was present and outlined the program for the annual meeting of the Maine Medical Association to be held at Rangeley Lakes and urged all members to attend.

Herbert Kelly, M. D., of Philadelphia, guest speaker, presented an excellent address on *Important Phases of Nutrition and Vitamin Deficiency Disorders*. The address, enjoyed by all present, was discussed by Elton R. Blaisdell, M. D., M. Carroll Webber, M. D., W. F. W. Hay, M. D., George A. Coombs, M. D., and Dr. Alvah C. Thompson and Dr. Ira W. Stockwell of the Portland Dental Society.

One hundred members and guests from the Portland Dental Society attended.

DONALD H. DANIELS, M. D.,  
Secretary.

### Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, April 2, 1940, at 8.15 P. M. The President, Dr. F. A. Ferguson, presided. There were thirty members and one guest present.

Dr. Henry B. Finks was elected to membership.

The paper of the evening was presented by Dr. James M. Parker. His subject was *The Surgical Treatment of Varicose Veins*. The paper was discussed by Drs. W. E. Tobie, I. M. Webber, P. P. Thompson, E. S. Lothrop, R. O. Meisenbach, and E. A. McLean

ALICE WHITTIER, Secretary.

### Kennebec

A meeting of the Kennebec County Medical Association was held at the Augusta General Hospital, Augusta, Maine, Thursday, April 18, 1940.

Clinical Session at 5.00 P. M., which was presided over by Blynn O. Goodrich, M. D., President of the Association.

1. Hypernephroma With Lung Metastasis—John Metzgar, M. D.

2. Sub-acute Glomerular Nephritis—Thomas Fay, M. D.

3. Three Cases of Rheumatic Fever—W. H. McWethy, M. D.

4. Acute Appendicitis With Complications—G. H. Lambert, M. D.

5. Streptococcus Laryngitis—Pierre Provost, M. D.

Dinner was at 6.30 P. M., which was followed by a business meeting.

Minutes of the last meeting were read and approved.

The application of Paul D. Giddings, M. D., of Augusta, Maine, was received and referred to the Council.

The address of the evening was given by William Reid Morrison, M. D., of Boston, Mass., the title of which was: *Management of Complications of Appendicitis*. His talk was very instructive and practical, and brought out a great deal of discussion.

There were 50 members and guests present.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,  
Secretary.

### Penobscot

Charles L. Scudder, M. D., consulting surgeon for the Massachusetts General Hospital, Boston, was guest speaker at the dinner and clinic of the Penobscot County Medical Association, March 19, 1940. The dinner served at the Eastern Maine General Hospital following the clinic was attended by many of the members of the County Association and several guests.

Doctor Scudder's lecture on *Fractures of Os Calcis* was illustrated by moving pictures.

FORREST B. AMES, M. D., Secretary.

Joseph H. Pratt, M. D., Chief of Staff of the Pratt Diagnostic Hospital, Boston, guest speaker at the meeting of the Penobscot County Medical Association, Tuesday, April 16, 1940, conducted Medical Ward Rounds at the Eastern Maine General Hospital at 9.30 A. M.

Dinner at the Bangor House at 6.30 P. M. was followed by a business meeting and the evening program at which Doctor Pratt spoke on *Recent Advances in the Diagnosis and Treatment of Pancreatic Disease*.

FORREST B. AMES, M. D., Secretary.



## York

The quarterly meeting of the York County Medical Society was held on April 3, 1940, at the Kennebunk Inn, at Kennebunk, Maine. Those present enjoyed one of the best dinners ever served at a Society meeting.

The business meeting opened at 2.15 P. M. with the reading of the minutes, followed by remarks from our State President, George L. Pratt, M. D. He spoke on State conditions in general and on Socialized Medicine.

Doctor Cobb of Sanford spoke on plans for the annual meeting at Rangeley Lakes.

It was voted to omit the summer meeting.

The meeting was then turned over to E. E. Holt, M. D., of Portland, and the following program proved to be one of the most interesting for a long time.

Management of Head Injuries:

Neurology—Eugene Macdonald, M. D., Portland, Maine.

Surgery—William Cox, M. D., Lewiston, Maine.

X-Ray—John P. Goodrich, M. D., Waterville, Maine.

First Aid—Harry Brinkman, M. D., Wilton, Maine.

Ocular Signs—E. E. Holt, M. D., Portland, Maine.

There were eighteen members and thirteen guests present.

Our next meeting will be held in the evening at Biddeford, Maine, on October 2, 1940.

C. W. KINGHORN, M. D., *Secretary*.

## New Members

### Androscoggin

J. B. Marcotte, M. D., Lewiston, Maine.

### Aroostook

Bernard Gagnon, M. D., Patten, Maine.

F. F. Larrabee, M. D., Washburn, Maine.

Robert B. Somerville, M. D., Presque Isle, Maine.

### Cumberland

Joseph E. Porter, M. D., Portland, Maine.

### Oxford

Alfred Oestrich, M. D., Mexico, Maine.

### Washington

Alfred W. Norris, M. D., Jonesport, Maine.

### York

Leon Nemon, M. D., Portland, Maine.

## Coming Meetings

### County Medical Societies

Kennebec County Medical Association, Frederick R. Carter, M. D., Augusta, Secretary.

May 16, 1940. Veterans' Administration, Togus, Maine.

Speaker—Joseph V. Meigs, M. D., Boston, Massachusetts.

Subject—*Female Endocrinology*.

### State Medical Associations

Connecticut State Medical Society, Creighton Barker, M. D., 258 Church Street, New Haven, Secretary.

Annual Meeting—Hartford May 22-23, 1940.

Maine Medical Association, Frederick R. Carter, M. D., 22 Arsenal Street, Portland, Secretary.

Annual Meeting—Rangeley Lakes, June 23-25, 1940.

Massachusetts Medical Society, Alexander S. Begg, M. D., 8 The Fenway, Boston, Secretary.

Annual Meeting—Boston, May 21-22, 1940.

New Hampshire Medical Society, C. R. Metcalf, M. D., 5 S. State Street, Concord, Secretary.

Annual Meeting—Manchester, May 14-15, 1940.

Rhode Island Medical Society, Guy W. Wells, M. D., 124 Waterman Street, Providence, Secretary.

Annual Meeting—Providence, June 5-6, 1940.

### National Medical Societies

American Medical Association, Olin West, M. D., 535 North Dearborn Street, Chicago, Secretary.

Annual Meeting—New York, June 10-14, 1940.

**EXPERIENCED PHYSICIAN:** With hospital training, private practice, internship, National Board, wants position with hospital or assistantship to busy practitioner. Special experience in Medicine, Tuberculosis, Psychiatry, Physiotherapy. Available by July. Reply to Journal Maine Medical Association, 22 Arsenal St., Portland, Maine.

## For Sale

The office equipment of the late Arthur A. Shaw, M. D., of Clinton, Maine. Furniture, books, instruments and drugs. If interested call at Doctor Shaw's office or write to: Ethel F. Shaw, Clinton, Maine.

## For Rent

Offices and equipment of the late Fred A. Bragdon, M. D., Inquire of Mrs. Fred A. Bragdon, 28 Main Street, Springvale, Maine.

## Notices

### *A. M. G. A. Golf Tournament*

The American Medical Golfing Association will hold its twenty-sixth annual tournament at Winged Foot Golf Club, Mamaroneck (Westchester County), New York, on Monday, June 10, 1940. Members may tee off from 7.30 A. M. to 2.00 P. M.

**FIFTY TROPHIES AND PRIZES:** Thirty-six holes of golf will be played in competition for the fifty trophies and prizes in the eight events.

**TWO 18-HOLE CHAMPIONSHIP COURSES:** The twenty-sixth tournament of the American Medical Golfing Association at Winged Foot promises to be a wonderful affair. The club is one of the most elaborate in the country, with a beautiful clubhouse and two sporty courses. The A. M. G. A. officers anticipate that some 250 to 300 medical golfers from all parts of the United States will play 36 holes in New York on June 10th.

**APPLICATION FOR MEMBERSHIP:** All male Fellows of the American Medical Association are eligible and cordially invited to become members of the A. M. G. A. Write Executive Secretary, Bill Burns, 2020 Olds Tower, Lansing, Michigan, for application blank. Participants in the A. M. G. A. tournament are required to present their home club handicap, signed by the club secretary, at the first tee on the day of play. No handicap over 30 is allowed. Only active Fellows of the A. M. G. A. may compete for prizes. *No trophy is awarded to a Fellow who is absent from the annual dinner, which is always worth while waiting for!*

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### *State of Maine*

#### *Board of Registration of Medicine*

Adam P. Leighton, M. D., Secretary

List of Physicians licensed in Maine, March 13, 1940:

C. Davis Belcher, M. D., Farrington Hospital, Portland, Maine.

William B. Blaisdell, Jr., M. D., 489 State Street, Bangor, Maine.

John A. Caswell, M. D., Eastern Maine General Hospital, Bangor, Maine.

Clement L. Donahue, M. D., Maine General Hospital, Portland, Maine.

George F. Emerson, M. D., Farmington, Maine.

Donald C. Gates, M. D., Gray, Maine.

Paul D. Giddings, M. D., 25 Gage Street, Augusta, Maine.

Maximilian Hirschler, M. D., 5 Jefferson Street, Lewiston, Maine.

John R. Merrick, M. D., Maine General Hospital, Portland, Maine.

Rosario A. Page, M. D., Bridgeport Hospital, Bridgeport, Connecticut.

Hans Schurmann, M. D., St. Mary's Hospital, Lewiston, Maine.

Reinhold Gerard Eduard Ulpts, M. D., White Plains Hospital, White Plains, New York.

Preston James van Kolken, M. D., 143 East 22nd Street, Holland, Michigan.

#### *Through Reciprocity*

Paul Vincent Davis, M. D., Warrenton, Virginia.

Samson Fisher, M. D., Bristol, Maine.

John T. Guy, M. D., Portsmouth, New Hampshire.

Joseph Gardiner Ham, M. D., Maine General Hospital, Portland, Maine.

Hyman Hillstein, M. D., Mt. Desert, Maine.

Joseph P. Reath, M. D., St. Davids, Pennsylvania.

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### *New England Pediatric Society*

*May 15, 1940*

4.00-5.30 P. M. Clinical Presentation by Staff at Massachusetts General Hospital.

6.15 P. M. Refreshments at Longwood Towers.

7.00 P. M. Dinner at Longwood Towers. Price, \$1.50.

8.15 P. M. Symposium on Adolescence.

1. Psychological Disturbances and Adjustments of Adolescence—James S. Plant, M. D., Essex County Juvenile Clinic, Newark, N. J.

2. Scholastic Difficulties of Adolescence—Mr. C. E. Allen, Headmaster of Rivers School, Chestnut Hill, Mass.

3. Disturbances of Menstruation and Ovulation of Adolescence—John Rock, M. D., Visiting Surgeon, Free Hospital for Women, Brookline, Mass.

R. CANNON ELEY, M. D., *President*,

JAMES MARVIN BATY, M. D., *Secretary*.

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### *Jefferson Medical College Reunion*

During the convention of the American Medical Association in New York City, June 10 to 14, 1940, the Jefferson Medical College Alumni Association will hold its Reunion Banquet on Wednesday, June 12, at 7 o'clock P. M., at the Murray Hill Hotel on Park Avenue at 40th Street. Tickets are \$2.50 each.

Request for reservation may be addressed to me at that hotel.

But if you neglect to make reservation—come anyway.

THOMAS F. DUHIGG,

*Chairman Dinner Committee.*



## Book Reviews

### *"Primer of Allergy—A Guidebook for Those Who Must Find Their Way Through the Mazes of This Strange and Tantalizing State"*

By Warren T. Vaughan, M. D., Richmond, Va.

Published by The C. V. Mosby Company, St. Louis, 1939. Price, \$1.50.

The study and treatment of allergic diseases or afflictions has never been accomplished with ease; in fact, not a few practitioners would prefer it if they were spared the privilege of dealing with allergy. Dr. W. T. Vaughan, the author of "Practice of Allergy," a most remarkable piece of work (recently reviewed in THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION), now presents, with this small, pocket-sized book, the physician and the layman with a sort of public service manual which can be purchased by the allergic person. In a pleasing manner the author tries to inform the allergic reader, so far as this is possible, what the medical profession knows about this affliction, what the sufferer can do for himself and for his physician in their combined effort to get at the very root of the trouble in each and every individual case. Only by friendly, diligent, lengthy coöperation of the doctor, the patient and the patient's family, is it possible to discover or devise therapeutic measures for the remedy of allergic afflictions and promote a more enjoyable state of health.

### *"Diseases of the Skin"*

By Richard L. Sutton, M. D., Sc. D., L. L. D., F. R. S. (Edin.), Professor of Dermatology, University of Kansas, School of Medicine; and Richard L. Sutton, Jr., A. M., M. D., L. R. C. P., Associate in Dermatology, University of Kansas, School of Medicine; with 1,452 Text Illustrations and 21 Color Plates. Tenth Edition, Revised, Enlarged and Reset. Published by The C. V. Mosby Company, St. Louis, 1939. Price, \$15.00.

One is not always able in reviewing a book to compare successive editions and thus watch the progress of the specialty which forms the basic structure of a book and the growth of the author who accumulates specific information pertaining to his specialty and then presents the accomplishments of his accumulateness, industriousness, perseverance, and his love for perpetuity in good-fellowship and family tradition in book form to his fellow physicians to use as a guide in their daily work, to enjoy its ownership, and to treat it as one would treat a masterpiece.

The first edition was published in 1916. Even in those days it contained 693 illustrations and 8 colored plates on its 916 pages. In its preface we read that "The present volume is an outgrowth of several years of study along this particular line, and is an attempt to present the entire subject of dermatology in a comprehensive, and, at the same time, concise manner. After 23 years of successful practice in dermatology and the recording of the same in 9 editions of his comprehensive, yet concise textbook, the author now presents a still better, more comprehensive, yet still more concise new edition and he has accomplished this remarkable feat with the collaboration of his son. Thus,

the "Diseases of the Skin," 10th edition, by Sutton and Sutton, comes to the medical profession in its largest, richest form: 1,548 pages, 1,452 text illustrations, 21 color plates, and 30,000 bibliographic references. The preface of this edition, true to the motivating spirit that engendered it reminds us that "Few branches of medicine have made such progress in the past four years as has dermatology. Without losing recognition of this field of practice as a specialty, we believe that the time has come to tie descriptions and concepts of disorders of the skin with general medicine and biology. Here we have attempted to do this. The point of view is taken that the processes of pathology are in general inevitable responses under the circumstances; a furuncle is the normal bodily reaction to virulent staphylococci in a hair follicle. Diseases are three-dimensional moving pictures. Skin diseases are visible tissular activities."

Not only does a page by page comparison of the first and the tenth editions show at a glance the great strides that have been made during the elapsed time between their appearances; not only does the large amount of bibliographical material stand witness for industrious research activities; the real advancement is clearly demonstrated in the clear description of etiology, symptomatology, diagnosis and treatment of dermatological diseases of national as well as international repute. In addition, the pictures illustrating the text and the style of printing serve as a fine exposition of the advances made in the printing and publishing industry. It is a masterpiece in dermatological literature.

### *"Textbook of Nervous Diseases"*

By Robert Bing, Professor of Neurology, University of Basel, Switzerland. Translated and Enlarged by Webb Haymaker, Assistant Clinical Professor of Neurology and Lecturer in Neuro-Anatomy, University of California. From the Fifth German Edition. With 207 Illustrations Including 9 in Color.

Published by The C. V. Mosby Co., St. Louis, 1939. Price, \$10.00.

The medical student and the general practitioner of the English-speaking America and other countries will be greatly pleased with this the first English translation of Bing's most excellent "Lehrbuch der Nervenkrankheiten, Fünfte Auflage, 1937." An additional pleasant experience is in store for them when they examine the book and find that it in no way reads like a laboriously translated profoundly scientific textbook but rather like any one of our best American works written by American authors. The translators have accomplished a most remarkable feat: There is clarity of style and composition; accuracy in presentation of facts as presented in the original text; logically correct interpretation of clinical findings. In order to make this work most useful, practicable and corresponding to American needs and usage the text had to be considerably rearranged, augmented and re-adapted. This has been remarkably well done. Professor Bing has been called "one of the most lucid writers in medical literature." Dr. Haymaker's translation of this work makes Bing's "Textbook of Nervous Diseases" one of the finest additions to the medical literature of North America.

*Program in Brief*  
*Eighty-Eighth Annual Session*  
*Maine Medical Association*

*Rangeley Lake Hotel*  
*Rangeley Lakes, Maine*

SUNDAY, JUNE 23, 1940

Golf Preliminaries.

4.30 P. M. First meeting of the House of Delegates.

8.30 P. M. Entertainment for the doctors and their wives.

MONDAY, JUNE 24, 1940

9.30 to  
12.00 A. M. Group conferences with Chairmen.

12.30 P. M. Luncheon.

Tables reserved for Alumni of various medical schools and members of the  
Tumor Clinics.

2.00 to  
4.45 P. M. Clinico-pathological-scientific session.

5.00 P. M. Election of President-Elect.

5.30 P. M. Second meeting of the House of Delegates.

7.00 P. M. Dinner and dancing.

9.00 P. M. Address by V. W. Peterson, Special Agent, Federal Bureau of Investigation,  
Boston.

9.45 P. M. Address by a representative of National Physicians' Committee.

TUESDAY, JUNE 25, 1940

9.30 to  
12.00 A. M. Group conferences with Chairmen.

12.30 P. M. Luncheon. Tables reserved for Past Presidents and County Secretaries.

2.00 to  
5.00 P. M. Scientific Session.

Golf Finals.

7.00 P. M. Banquet (dress informal).

Introduction of visiting delegates and guests by President George L. Pratt,  
M. D.

Presentation of Fifty-Year Service Medals.

Address: Governor Lewis O. Barrows.

Address: Morris Fishbein, M. D., Editor of *The Journal of the American  
Medical Association*, "Quackery in Medicine."

(OVER)



*To the Ladies*

The success of our convention is to a large degree dependent upon your efforts. You have all been selected to serve on the committee for listening to and ignoring excuses for not attending the Convention. The report of your Committee will be awaited with much interest. Beside the gratitude of your husband, you will be further repaid for your efforts by special entertainment arranged by Mrs. Pratt and Mrs. Weymouth.

*Golf Tournament*

The third annual handicap golf tournament is to be directed by Forrest C. Tyson, M. D., of Augusta. The excellence of the course is well known. The prizes are better than ever. They will be awarded for scores made during this tournament although cards of previous rounds may be displayed and alibis will be listened to with sympathetic interest.

*Convention Rates*

*Rangeley Lake Hotel*  
*Rangeley Lakes, Maine*

The following rates, which include all meals and banquets, will prevail during the convention:

Single room occupancy, private bath .....	\$8.00 per day
Single room occupancy, running water .....	7.00 per day
Double room, twin beds, private bath, two persons in room .....	7.00 per day
Double room, twin beds, running water, two persons in room .....	6.00 per day
Three and four persons in two double rooms with connecting bath .....	7.00 per day

Cottages situated near hotel and entrance to the grounds, same rates as main house.

The charge for non-registered guests for meals will be as follows:

Luncheon .....	\$2.00
Dinner .....	2.00
Banquet .....	2.50

Garage fee 50c per night. Free outdoor parking.

Golf Greens Fees will be complimented to all members, also use of the Tennis Courts.

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## *Benign Gastric Tumor: Report of Two Cases*

By ISAAC M. WEBBER, M. D., and WILLIAM D. ANDERSON, M. D., Portland, Maine

Solitary non-cancerous tumor involves the stomach rather infrequently. When such a condition prevails, however, the growth is often pedunculated in form and is usually an adenoma, fibroma, or leiomyoma. These types of neoplasm may cause indefinite complaints referable to the epigastrium, agonizing upper-abdominal distress produced by intermittent pyloric occlusion, massive hemorrhage, or anemia which may be most baffling when the surface of an otherwise quiescent tumor becomes so ulcerated as to permit oozing.

Case I.—A white, married woman, aged sixty years, sought medical advice from Dr. Elton R. Blaisdell at the Maine General Hospital, October 28, 1939, because of abdominal pain, heart burn, sour stomach, and eructations of four weeks' duration. Pain was of a dull nature, located in the epigastrium, occurring four or five times during her waking hours. Each episode lasted about five minutes. Relief was obtained by massage of the area. The pain had no relation to the ingestion of food and it never occurred at night. The sour eructations and heart burn were most pronounced in the morning just after arising and persisted throughout the day to a lesser degree. Some relief was noticed after taking bicarbonate of soda.

There was no vomiting and but very little nausea. The appetite, which had always been good in the past, became poor. Digestion had always been excellent prior to the past four weeks. A weight loss of seven pounds in four weeks had occurred. The bowels had always been constipated requiring laxatives. She denied any change in bowel habits or evidence of bloody or tarry stools.

Significant findings on general examination comprised only tenderness in the epigastrium without the presence of muscular spasm or palpable tumor. A soft systolic cardiac murmur was audible near the apex impulse. The concentration of hemoglobin was 75 percent; the erythrocytes numbered 4,700,000 and the leukocytes 4,250 for each cubic centimeter of blood. The percentages of the various types of leukocytes were within normal limits. Examination of the stools for occult blood gave negative results. Roentgenologic study of the gastrointestinal tract by Dr. Jack Spencer demonstrated "a proliferative, ulcerative growth involving an 8 centimeter area in the antrum representing a carcinoma." Six hours after ingesting the barium meal seventy-five percent of it remained in the stomach (Fig. 1).





Fig. 1. Roentgenogram of stomach showing six-hour residue and between the two arrows the translucent area caused by the pedunculated tumor.

At operation a pedunculated tumor 2.5 centimeters in length and 1 centimeter in breadth was found on the greater curvature of the stomach approximately 4 centimeters from the pyloric ring. The pyloric part of the stomach including the tumor was resected. The gastrointestinal continuity was re-established by anastomosing the transected end of the stomach to the side of the jejunum several centimeters below the ligament of Treitz according to the modified Hoffmeister method. The pathologist, Dr. Mortimer Warren, reported "a benign polyp with ulceration of its tip; no evidence of malignancy." The patient's hospital convalescence was uneventful and digestion to date has been normal. A recent post-operative roentgenogram of the stomach showed the anastomotic stoma to be functioning freely.

That the pedunculated gastric tumor situated near the pylorus was not productive of symptoms until its surface became ulcerated, or until it became sufficiently enlarged to impinge during peristalsis upon the pyloric ring thus causing intermittent obstruction, constitutes a possibility which is only speculative. The probability of intermittent obstruction as an important factor in the symptomatology is supported by the attacks of pain lasting four or five minutes which appeared to be relieved by massaging the upper abdomen, and by the roentgenologic evidence of a relatively large filling defect in the antrum contiguous to the pyloric sphincter.

Case II.—A white, unmarried woman, thirty-five years of age, was admitted to the Maine General Hospital, July 28, 1938. In the forenoon, three days prior to entering the hospital, mild nausea occurred. Relief promptly followed the ingestion of bicarbonate of soda. At supper time, because of an impaired appetite, she partook only of a small piece of brown bread and two cups of tea. She became nauseated, retched considerably, and vomited. Ten minutes later she vomited fresh blood in amount estimated to be a cupful. After vomiting bloody material a third time she momentarily lost consciousness. She then remained quietly in bed until nearly midnight when a large black stool was passed. In the morning several clots of blood were observed in the vomitus. Signs of active bleeding thereafter abated. Previous to the present illness she considered her appetite and digestion to have been normal. Bowel function was reported regular without the aid of laxatives. For several years she had noticed a "lumpy feeling" in the epigastrium, particularly after eating a hearty meal. Her weight of one hundred forty-two pounds had remained unchanged.

Important findings recorded in the examination were: Extreme pallor of the skin and mucous membrane, a regular heart rhythm of 120 beats each minute, a slight systolic cardiac murmur, and a blood pressure of 100 systolic and 60 diastolic. Gentle palpation of the abdomen revealed no mass or tenderness. The concentration of hemoglobin was 5.3 grams in 100 cubic centimeters of blood. The erythrocytes numbered 1,820,000 and the leukocytes 5,650 in each cubic millimeter of blood. Occult blood pigment was found in the stool.

The normal features of the blood were partially restored by four blood transfusions. In due time a carefully selected bland diet was instituted. After twenty-one days of hospitalization she was permitted to continue treatment at home. The quality of the blood remained at a satisfactory level. The gastric content contained no free hydrochloric acid. X-ray examination by Dr. Langdon T. Thaxter of the stomach and intestines disclosed in the mid-portion of the stomach a rounded mass about 2 inches in diameter in



the center of which was noted a frank ulceration. At the end of six hours there was no residue of barium in the stomach. Doctor Thaxter considered it unlikely that the tumor was a carcinoma (Fig. 2).



Fig. 2. Large circumscribed defect with ulceration in center, which is the usual picture in leiomyosarcoma of stomach.

September 20, 1938, in a much improved condition, she was re-admitted to the hospital for surgical treatment. At operation a tumor somewhat collar-button shaped, about 7 centimeters in its longest dimension and 4 centimeters in its widest diameter, was found attached to the posteroinferior wall of the stomach. The larger end of the tumor, covered with mucosa except at the point of ulceration, was projecting into the stomach cavity; the narrow portion of the growth, corresponding to the constricted part of a collar button, traversed the thickened gastric wall; and the smaller nob of the neoplasm projected from the external surface of the stomach. Through an opening in the gastrocolic omentum a V-shaped portion of the stomach including the tumor was resected. The sides of the elliptical opening in the stomach were approximated with sutures. The pathologist, Dr. Mortimer Warren, reported the tumor to be a leiomyoma (Figs. 3 and 4). The patient's convalescence was prompt

and without incident. Her health and digestion have remained normal to date. Roentgenological examination of the stomach, made approximately one year after removal of the neoplasm, revealed no evidence of recurrence and a gastric emptying in normal time.

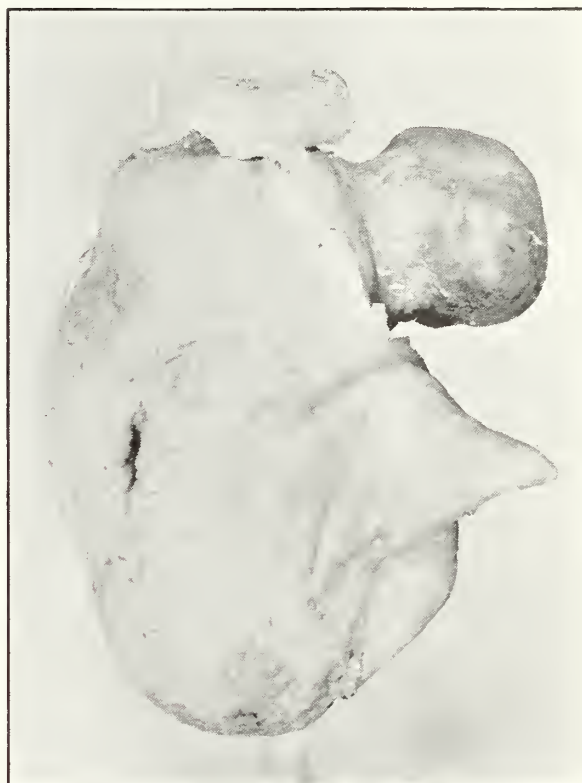


Fig. 3. Neoplasm showing point of ulceration in mucosa.

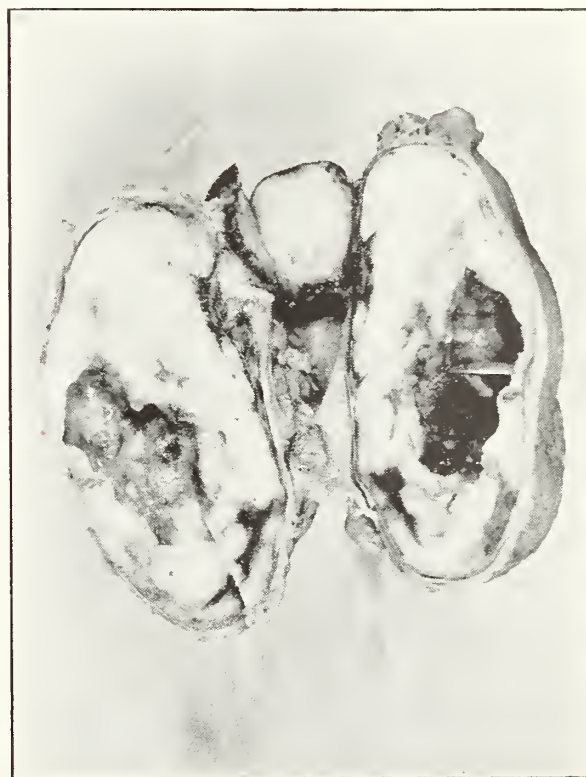


Fig. 4. Neoplasm showing extent of ulceration.



The character of this tumor and the course of related events exemplify the fact that a gastric tumor of considerable size may remain unproductive of dyspeptic manifestations for a relatively long period of time, and that the first real warning of its presence may be a hemorrhage from the stomach so severe as to threaten the life of its possessor. If the sensation of a "lumpy feeling" in the upper abdomen was an indication of the stomach lesion it was too slight to cause the patient to seek medical attention or to employ self administered remedies.

Inasmuch as it was impossible to determine at operation the potentiality of either tumor to reappear locally or in some distant organ as a true metastasis, it seemed advisable to excise rather widely en masse the involved stomach wall in each instance. Hence, for the more benign lesion in Case I, because of its close proximity to the pyloric

sphincter, it was necessary to sacrifice the pylorus and to restore the continuity of the gastro-intestinal tract by a rather complicated procedure of considerable magnitude. For the tumor in Case II, with the more inherent possibilities of malignancy, the superabundant tissue of the greater gastric curvature facilitated relatively wide removal of the growth from this area by V-shaped excision and a comparatively simple restoration of the gastric continuity by approximation of the opposing cut edges of stomach wall. The course of events to date appear to have justified these procedures. Nevertheless, more time must elapse before conclusions can be drawn as to the wisdom of the therapy selected for either patient or as to the possibility of the histologically benign leiomyomatous tumor reappearing locally or in some organ other than the stomach.

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This report deals with 96 cases of carcinoma of the corpus uteri treated by irradiation alone.

In the majority of cases the treatment was restricted to irradiation because the patients were bad risks for major surgery.

Despite this fact, the five-year survival rate for all cases was 39 per cent, and for the "operable" cases 56.3 per cent.

A clinical grouping for prognostic purposes has been presented which we believe may be of practical value.

It is significant that 56.3 per cent of the cases in which the uterus was not larger than a two and one-half months' gestation and in which there was no evidence of metastases at the first examination survived five years or more.

Under radiation therapy the degree of malignancy as determined histologically does not appear to be as important a factor in prognosis as it is when surgery alone is the method of treatment.

Radiation therapy offers a valuable form of treatment, adequate for cure in many cases of carcinoma of the corpus in which hysterectomy cannot be utilized.

Pain due to carcinoma of the corpus before treatment is instituted would appear to be an important prognostic factor; 87 per cent of such cases in this series died of carcinoma.—  
DRS. WILLIAM P. HEALY and ROBERT L.

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BROWN, *The Am. Jour. of Roentgenology and Radium Therapy*, May, 1939.

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Dyspepsia is caused by cancer much more frequently in men than in women.

Cancer begins to become a relatively frequent cause of indigestion in both sexes at about the age of 45 years.—ANDREW B. RIVERS, M. D., *Jour. A. M. A.*, September 23, 1939.

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Thus the question: When in differential diagnosis should the doctor think of lymphoma? can perhaps be answered by saying that, not only in the obvious conditions of lymph node enlargement or splenic or hepatic enlargement but also in the case of any acute or chronic symptoms referable to the gastrointestinal tract, the genito-urinary tract, the lungs and mediastinum, the abdomen and retroperitoneal regions, the osseous system, the central nervous system, the skin, or in that of local swellings seemingly neoplastic or chronic in nature, not provably due to something else, the possibility of lymphoma should be considered. Particularly is the likelihood of lymphoma enhanced when the picture in question is characterized, among other things, by sustained or intermittent fever.—J. H. MEANS, M. D., *Jour. A. M. A.*, August 19, 1939.

## *Bingham Hospital Extension Services\**

By JULIUS GOTTLIEB, M. D., F. A. C. P., Pathologist, Central Maine General Hospital

This paper aims to present a general outline of the mechanism of the Bingham Hospital Extension Services in Maine, as applied to the pathology and laboratory divisions; and to indicate its inter-relationship with the various activities of the Bingham Associates in its objective of advancing rural medicine. A detailed description has been fully presented in the *Journal of the American Hospital Association* and the *New England Medical Journal* in recent issues. The basic concept embraces the provision of laboratory and pathological assistance to small communities approximating that available to those residing in university teaching areas. It is recognized that sickness in the smaller communities is as complex and diversified as that in larger cities, demanding equal skill and personnel. In addition, pathology and laboratory statistical data for the year 1938-1939 are presented as an index of the usefulness of these services.

The development of the Hospital Extension Plan to the present stage represents a third step in a general plan for the advancement of rural medicine. The preceding steps are Fellowship grants for practicing physicians in Maine for post-graduate study, and the development of diagnostic facilities at the New England Medical Center. Each of these three phases, although representing an integral unit in itself is closely interwoven and correlated with the other activities and not designed to be dissociated with one another, either in theory or in practice. Each phase is designed to stimulate and complement the other—both from a service and educational point of view. The general purpose is not to facilitate medical diagnosis by removing problems from any community, but to render available better facilities in the community for the study and solution of these problems. Although opportunities for assistance in medical diagnosis are generously offered, the fundamental purpose is that of furthering medical education. Ward walks by internists and specialists in various fields naturally assist in the diagnosis of the particular pre-

senting problems, but of greater importance is their teaching value for similar future problems. These ward walks are not intended to replace any method of education, but to supplement existing teaching activities by the bedside method.

Medical progress in the last decade has been remarkably swift. The scientific methods available as diagnostic aids have outstripped the economic abilities of many individuals and groups of individuals to avail themselves of the knowledge accumulated by extensive research in the various fields of medicine and particularly of its more intricate laboratory aspects. Elaborate and expensive laboratory equipment and skilled personnel have become essential in the practice of scientific medicine. The stage of rapid development and accumulation of medical knowledge has been aptly described as progress in the vertical direction, analagous to the stage of production in the world of economics. The distribution and application of this knowledge, or the so-called horizontal phase has met with difficulties quite identical with those in the field of economics with which medical problems are inextricably involved.

Recognizing the economic burdens imposed in the provision of adequate services in these fields, the Bingham Associates adopted a plan which may be termed as "group hospital practice in pathology, X-ray, and other divisions." The plan constitutes the creation of a center about which are associated neighboring smaller hospitals. In our district the Central Maine General Hospital Laboratory serves as a center for the associated smaller hospitals, including: Rumford Community Hospital, Bath Memorial Hospital, Brunswick Hospital, Knox County General Hospital, Augusta General Hospital, and Redington Memorial Hospital. These hospitals vary in distances about its center from 20 to 76 miles, as indicated on the chart, and in general are peripherally situated, although three of the hospitals fall in a direct route and two others are similarly located. Prior

\* Presented at the annual meeting of the Maine Hospital Association, Lakewood, August 30, 1939.



to the Hospital Extension Plan, laboratories had already been established in several of these institutions. In others, the establishment of laboratories was encouraged by the Bingham Associates and assisted in their establishment by the central pathologist. Where needed, technicians were employed by the associated hospitals and remunerations met in part or in whole by the Bingham Associates.

The initial step of the program was taken in 1937. As a result of the Bingham Associates Grants, it was possible for several of the Associated Institutions either to create or extend laboratory facilities to their physicians. Scholarship grants are offered to technicians desiring to engage in advance studies in the various phases of laboratory procedures. Such studies may be taken at the New England Medical Center or any other institution offering special instruction. During the preceding year, arrangements have been perfected at the New England Medical Center for advanced and concentrated studies, particularly in chemistry, bacteriology and hematology. In addition, a month's practical work may be obtained at the laboratory of the Central Maine General Hospital. During the absence of a technician from its own hospital, a substitute is provided, designated as "itinerant technician" thus affording a continuity of laboratory services at that hospital. Opportunity to each technician is offered to perfect herself in any of the branches of medical technology which may be obtained, and to bring back to these institutions the newer methods applicable as aids in clinical diagnosis. The advanced procedures and their interpretation are discussed at periodic conferences at the central laboratory, where emphasis is placed on their practical application of methods taught during scholarship periods.

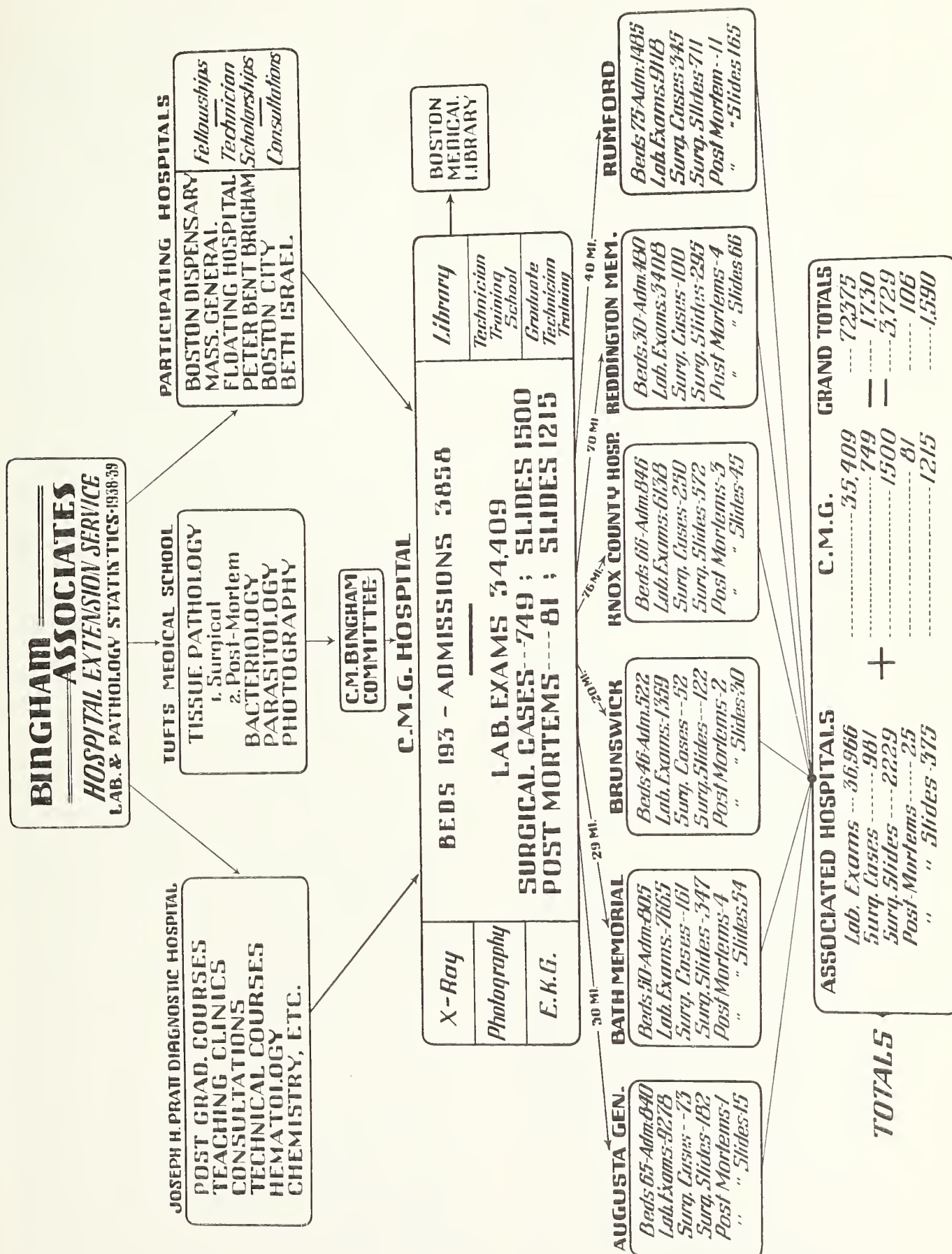
A newer method of technical training was employed last year. A one week's course in chemistry was given by the chief chemist of the Pratt Diagnostic Hospital to which technicians of the Associated Hospitals, Maine General Hospital and St. Marie's General Hospital were invited. Attendance ranged from ten to twenty-five at each session. During the interim the chemist was available at the Central Hospital for demonstrations, appraisals and criticisms of methods employed.

This method of teaching proved its efficiency, wherein a group of technicians can be simultaneously instructed as contrasted with the single scholarship teaching method. Similar courses are being planned in chemistry, bacteriology and hematology for the forthcoming year. While these courses have certain advantages over the method of single month's studies they cannot replace, however, the intensive teaching offered through the monthly scholarships.

The Central Maine General Hospital Laboratory receives materials submitted to it from the various associated hospitals for consultation and study, and in turn is privileged to forward to the Laboratories of the Joseph H. Pratt Diagnostic Hospital, material still offering technical or diagnostic difficulties.

Opportunities for submitting tissues to the Central Laboratory were formally offered to the various associated hospitals in July, 1938, thus extending the services already in practice. Surgical tissues and post-mortem material are routinely submitted to the central pathology laboratory in accordance with the requirements of the American College of Surgeons. Tissues so submitted may be reported to the physician without loss of time, inasmuch as the period of fixation and shipment practically coincide.

A trained tissue technician is provided for the preparation of all microscopic sections. The need for excellency in tissue preparation is immediately obvious from a diagnostic point of view. It has become apparent that tissue preparation requires a skill not ordinarily possessed by the general laboratory technician employed previous to the inauguration of the plan. All tissues are examined grossly and microscopically and diagnosed by the Central Pathologist. Reports are mailed, or telephoned where indicated, to the various associated hospitals. Slides are serially fixed and reviewed with the interested physician upon request. During the past two years, the pathologist has been called on many occasions for frozen sections and post-mortem examinations at these institutions. In many instances, these requests could be complied with. Although this plan is only in operation for less than a year, there has been a definite rise in the interest and number of post-mortems performed as indicated on the chart. A total of 25 post-mortem examinations were





performed at the various associated hospitals. In each instance, the procuring of the post-mortem examinations could be directly attributed to a physician in a locality interested in the development of its laboratory. The pathologist is also available for consultations and discussions of laboratory aspects of medicine at the various institutions. At several of these hospitals, a local physician has become particularly interested in laboratory medicine and it is hoped that in the course of time, some physician in each locality will assume to a greater extent, an interest and obligation in the conduct of his particular laboratory and serve as Clinical Pathologist or Laboratory Director. In several of the institutions, this phase of development is already in progress.

Tissues of unusual interest or presenting diagnostic problems to the pathologist are studied in conferences at Tufts Medical School for opinion. The Professor of Pathology of the Tufts Medical School is at all times available for such consultation. Weekly conferences are conducted at the school to which all Maine physicians are invited. These conferences are of important educational value to each of the participants wherein problems of unusual interest or difficulty are demonstrated and discussed. It thus becomes obvious that the tissue problems pertaining to patients in rural sections, under the Hospital Extension Plan, receive an opinion equal to that afforded by the large teaching institutions.

The statistical data as shown on the chart are indicative of the extensive employment of the laboratory facilities now available. The diagram indicates the general structure of the plan, and in some measure the inter-relationships between the various institutions. No attempt has been made to include all educational activities of the Bingham Associates in Maine, but it is immediately obvious that the program is quite comprehensive including the following:

1. Fellowships to Maine physicians for post-graduate studies
2. Diagnostic facilities at the New England Medical Center
3. Hospital Extension Services in:
  - a. General laboratory examinations
  - b. Pathology

c. Roentgenology

d. Electrocardiography

4. Scholarships for technicians
5. Lectures and demonstrations at the central laboratory for technicians
6. Library facilities through the Gerrish Memorial Library
7. Teaching Ward Walks at the associated hospitals
8. Teaching clinics at the New England Medical Center
9. Scholarships for dietitians, medical students and nurses where especially indicated

In any field of endeavor progressively and rapidly furthered by research, knowledge will out-strip its dissemination and application. A certain differential must always exist. Nevertheless in medicine particularly, this differential must be reduced to a minimum. This differential, great or small, will be present in any form of medicine and may serve as the point of attack on any existing system as its most vulnerable aspect. The greater the gap between the development of scientific medicine, and its application, the greater is the danger of attack by designing adversaries. The Hospital Extension Service Plan aims to narrow this differential gap.

The plan as outlined and the volume of work performed is a result of coöperative effort and understanding between the Bingham Associates, the Central Maine General Hospital and the various associated institutions. It is entered into voluntarily by the various institutions. Each party is at all times free to accept or reject any portion of the plan. The success is entirely dependent upon the recognition of the needs of the patient in whatever locality they may be, and an earnest endeavor to be of mutual assistance. It must be axiomatic that the elevation of medical standards and the more efficient services in another locality is of equal importance in a larger sense to those of its immediate vicinity, thus presupposing a newer and broader approach to the treatment of the ill than that which has been customarily charted. Coöperative hospital group practice gives promise of solving many of the economic and diagnostic problems confronting medicine today.

## *Graduate Education in Medicine\**

By FREDERICK T. HILL, M. D., Professional Building, Waterville, Maine

One of the greatest problems affecting the Medical Profession today is that of the development of a Continuation Program of Education. We have been hearing a good deal the past few years about Socialized Medicine or the threat of government controlled medicine. This is, of course, merely an indication of growing dissatisfaction on the part of many people with our present system of medical practice; and, if we are honest with ourselves, we must admit that oftentimes the present system has proven inadequate. The available medical service is oftentimes far from satisfactory.

If we should attempt to plot a graph on an imaginary chart, indicating the efficiency of medical service everywhere throughout the Country, we would have a series of peaks and dips; peaks representing points at which Medicine was the most efficient in the world, and dips where quite the reverse was the case. This is pretty generally realized and people are beginning to suggest the advisability of improvement. Now if we read history right, we know that whatever the people demand long enough and loudly enough, they will eventually get. In the early days of our Country there was a demand for better educational facilities and we saw the development of the public school system, under political control. Later there was a demand for better transportation facilities, and we saw the exit of the toll-road and of the toll-bridge. And recently there was a demand on the part of the people for better alcoholic facilities and we saw the end of Prohibition. So what people demand sufficiently, and long enough, they will eventually get; whether we like it, or not.

But State Medicine does not seem to me to be the ideal solution. While it might eliminate many of these dips in the graph, it would also inevitably prove detrimental to the peaks where medical efficiency is at a high point. It would perhaps give a little more evenly distributed medical service. But it is doubted if thinking people would ever be content with

a lowered standard of medical service, even if more evenly distributed. It would seem much better to continue our present system, trying to strengthen the weak points and to preserve the best features; continue to advance our scientific knowledge but make its result more readily available everywhere throughout the Profession, with consequent better medical service to the people.

This is, in a way, the aim and purpose of this Continuation Program of Education. We know that Medicine is not an exact science. We also know that it is a constantly changing one. New discoveries, the results of researches, are constantly bringing about a changing concept of many disease problems. We only have to think of the revolutionary changes that have taken place in the varying number of years since each one of us graduated from medical school. Yet if we were so minded, each of us might continue to practice today with the same mental equipment that we possessed on graduation. Our system of medical education is somewhat unbalanced. We take a young man, and give him four years of undergraduate instruction in our medical schools in which he gets the best possible medical education in the world today. Then, after one, two or three years' training in a hospital, the responsibility of organized medical education ceases. We have millions and millions of dollars invested in the four years of undergraduate instruction but virtually nothing available for the thirty or more tremendously important years when a man is in active practice, in a constantly changing profession, oftentimes intrusted with the responsibility of Life itself. If a physician is ambitious, progressive and conscientious, he will keep abreast in the Profession by constantly reading the current medical literature, by attending national and sectional meetings of the scientific medical societies, by visiting different clinics and teaching centers and perhaps, what is best of all, by connecting himself with an active hospital staff and attending its meetings, in

\* Address given before the New England Oto-laryngological Society, Boston, January 31, 1940.



which his own work and that of his confrères is carefully analyzed and evaluated. In other words, he carries on his own continuation program of graduate education.

Unfortunately, too many men have no desire to improve. They are perfectly content to carry on with quite the same mental equipment that they had at time of graduation, deteriorated somewhat by the inroads of Time, and possibly added to by certain practical experiences, — experiences, however, which may have been somewhat bitter at times, from the patient's point of view. Most of the time they do a very fair job and perhaps we should not criticise them too harshly. Obviously, a person in this category does not possess an inquiring mind. He is in a rut. He is isolated — either geographically or by virtue of his own personality. Perhaps he lacks the stimulus of association with leaders in the Profession. Oftentimes he may be so economically handicapped that it is quite impossible for him to carry on any improvement program of his own. And yet, these are the doctors of our communities, responsible for the health of the community, legally empowered to practice medicine, with all the responsibilities of Life itself.

We frequently hear criticisms of the high cost of medical care. Actually it is more often the high cost of poor medical care. In an attempt to improve this situation, this idea of a continuation program of education has been developed. There is nothing new about it. It is quite old. The only new thing is the realization of its necessity. Its purpose, again, is to make the best in Medicine more readily available throughout the Profession, and improve the standards where most badly needed.

Each year there has been a meeting of the chairmen of the different state committees on graduate education. It has been my privilege to attend each one of these meetings. It is most interesting to note how the problems vary in different parts of the Country and how many different methods have attempted to meet them to the best advantage. About the only common denominator to it all is the realization throughout the Country of the necessity for some such program. In Maine we have gone at this problem in a variety of ways. First, we have changed the character of the meetings of the State Medical Asso-

ciations, making them predominatingly educational. In addition to the annual meeting in the Spring, we have the Fall Clinical Session, modeled after the meeting of the College of Surgeons, consisting of clinics and demonstrations in hospitals. We are also participating in the New England Post-graduate Medical Assembly. We have made available a number of panels on different subjects such as pneumonia, arteriosclerosis, cardiorenal diseases, fractures, blood dyscrasias, etc., which may be sent around the State on demand. And then we have one feature which is quite unique, in that we have fellowships available by which we can send men away, usually to Boston, for one or two months' intensive study, and for which they are paid a stipend to cover their living expenses. These courses are very largely in Medicine, Minor Surgery, Obstetrics and Pediatrics. They were first made possible through the Commonwealth Fund. Later the Bingham Foundation, financed by Mr. William Bingham II, has further developed and elaborated the program.

An attempt is made to allocate these fellowships where there will be the greatest return in community dividends. These are proving of inestimable value. The men come back from these courses with their enthusiasm reawakened and stimulated, and it is all reflected in improved medical and health conditions in the communities in which they live and practice. Perhaps the greatest difficulty is the desire on the part of these men to repeat year after year. It is sometimes difficult to spread these fellowships around as they should be. Sometime ago, I received a request for one of these fellowships from a rather elderly physician practicing on an island off the coast of Maine. He said that he had not been off the island since graduation. He did not feel that he could afford either the time or the money to take any post-graduate education. Only recently, he realized how badly he was in a rut. Now he was beyond the age limit, for these fellowships are not given to the older men, but special provision was made in his case and he was given the opportunity of taking some of these courses. Now I leave it to you, who were the greatest benefactors from this course, the doctor or the residents of the island?

There is a little town in Maine where there

are two good conscientious, hard-working doctors. There is a very good community hospital in that town. Some time ago, it was learned that the hospital was to have the gift of X-ray equipment. There was none within miles and miles. Now it became a problem as to who was to do this X-ray work. By means of a special fellowship one of these doctors was enabled to go away for the Winter to take work in Roentgenology. He has gone back there, not a finished Roentgenologist, but able to do the necessary emergency work. I know from personal experience that it has been a great boon to this whole community. It is, of course, rather obvious that, so far, this problem has been handled largely by methods which one might call "spoon feeding." Sometimes one is almost tempted to call it forced feeding, and the results do not always seem to justify the efforts entailed. But, after all, if only a few seeds take, it probably justifies the sowing. Certain cases are hopeless, the soil is unfertile, and only Time and Death will solve the problem.

Eventually, in my opinion, this program will become centered in the hospital. I do not mean any one certain hospital but in the community hospital. The hospital today probably exerts a greater influence on clinical medicine than any other institution. It has done more than any other institution to improve the standards of clinical practice. It even exerts its influence on communities without hospital facilities because the doctors in these small places are more and more tying them-

selves up to the nearest available hospital. I know, from personal experience, that many of these men will drive fifty and sixty miles a night to attend a staff meeting, provided only the program is worthwhile.

Then if the hospital can insist upon improved standards of practice it can and should insist on improved standards of education. This means that each hospital must become, to a certain degree, a teaching hospital. One does not need marble halls and ornate buildings for this. Actually, all that is needed to make a teaching hospital is one patient and some inquiring minds on the staff of physicians attending the patient. Now of course, there is nothing new in this solution; it is as old as the problem itself. We have had the answer in a number of places in this Country. Specifically, as an example, we might consider the Eye and Ear Infirmary in Boston, as developed by Dr. Mosher. I do not think that Dr. Mosher realized the breadth of his idea. He was seeking to build, and did build, the finest teaching hospital in Oto-laryngology in the world. But this basic thought of a teaching hospital is the real solution to this problem. With this widely developed throughout the Country, with each community hospital imbued with the idea of constant improvement and ready to assume the responsibility for carrying on a program of education, our standards of practice will be kept at a point of high efficiency and a great deal of present-day dissatisfaction will be dispelled.

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Tuberculosis in the Aged — It is known that when old people are found to have tuberculosis it is almost impossible to teach them to take care of themselves and protect others from infection. They will not cover their mouths during a cough or sneeze, nor will they try to protect or destroy their sputum. Their idea is that they have lived all these years with this old cough, it will not hurt them and they do not see how they can hurt anyone else. Elderly people with a chronic cough and positive sputum are a menace to society and should be isolated. —C. L. HARRELL, M. D., *Virginia Med. Monthly*, Nov., 1939.

"Make the sanatorium the first resort of the tuberculous, not the last." H. E. DEARHOLT, M. D.

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All behavior is related and it is difficult to distinguish between the behavior which concerns the individual alone and that which concerns others. What a man does about his health, for instance, may concern his family, his business associates, the community and even the entire world. *The Purposes of Education in American Democracy, National Education Policies Comm.*, 1938.



## "Of Making Many Books"

By R. BLISS, M. D., Bluehill, Maine

Passing strange and entirely regrettable is the inclination of the retired physician to wield the devastating pen when nearly every country in the world offers such opportunities for the less deadly sword. Doctor Hugh Cabot retired from a life profoundly influenced by the Mayo Clinic has felt constrained to write a book, "The Patient's Dilemma." This book, we must assume, was written without the aid of either Lowell or God since it seems to be devoid of both humor and mercy. It bears the stamp of a clinical teacher, didactic and arbitrary. It recognizes an evil known to exist, magnifies the evil, places the responsibility and more than suggests the remedy. The book is readable because of the popularity of the subject and the overtones of the text.

As might be expected the author's experience and environment have led him to exalt the group clinic which he knows so well and to charge the physicians of small villages, of whom he obviously knows nothing, with abysmal ignorance.

It is assumed that a life spent as a private practitioner on Beacon Street, a clinician and teacher in the Massachusetts General Hospital and the Mayo Clinic, constitute an all embracing experience qualifying him for intimate estimates and criticisms of practices and methods in wide open spaces where doctors are said to be needed and where, he charges, medical service is of a low order. He has appointed himself the torch bearer of a new order in which thousands of Mayo clinics, government supported, should be set in operation in regions convenient for the service of all.

When the country physician calls upon a middle-aged patient who has never been clinic serviced, he immediately forwards the patient to the nearest clinic where a group of specialists mill him through and give to him, or sell to him, "a good article" of medical care. The physicians of the small towns and villages will be expected to attend short simple illnesses and send all others to the regional

clinic. These country doctors are to be keen, well educated young men who by frequent courses in the great clinical centers, continue to be good diagnosticians surcharged with good old country doctor qualities and yet content, year after year, to act in their capacity as transfer agents for the clinical centers. Just what vitamine is to be fed them to produce this bovine contentment is not revealed in Doctor Cabot's book. This book should be read by every legislator and every physician in Maine where the burden is acknowledged but only fractionally met by the state. A state which pays old age pensions and unemployment insurance but ignores the cost of medical care; an enlightened commonwealth in which less than a thousand doctors bear the burden of medical and surgical care for the entire indigent and wily proportion of eight hundred thousand persons.

In Doctor Cabot's plan both Doctor and Hospital would be adequately paid by the government and the financial burden equally borne by the taxpayers; a solution which cannot fail to appeal to the surgeons of this particular state.

The same author cannot be forgiven for the article entitled, "Give the Patient a Break," in the *American Magazine* for April. This shameless outburst signed by Doctor Hugh Cabot is illustrated by Talburt who represents a patient being knocked out by three gangsters bearing clubs labeled, "Bills," is in the same vein as, "The Patient's Dilemma." In the magazine it is sandwiched in between, "Can a Fox Lick a Bulldog," and, "Tonight is Mine," and should be proud of its company. If the distinguished author's object is to humiliate every doctor of medicine in the land he has eminently succeeded.

Without modesty or mercy the profession is charged with mercenary motives and scheming mesalliances but it is related with all seriousness that when the author was engaged in profitable Back Bay private practice it was a wicked secretary who was caught fix-

*Continued on page 173*



GEORGE L. PRATT, M. D.

*President Maine Medical Association, 1939 - 1940*



## *The President's Page*

*To the Members of the Maine Medical Association:*

As this is my last President's Page, I would like to express my appreciation of the honor of having served you as President, and also of the many courtesies shown by all the officers and members of the State and County organizations.

Visiting the various societies has been a pleasure, and I am glad to report them generally in good shape. This has been rather a quiet year, but it may well be only the calm before the storm.

We shall have good leaders next year in Dr. Foster, Dr. Carter and the Council, and we have complete confidence in them, but the rest of us should be well organized, well informed, and ready to act in their support.

The Scientific Committee has arranged a most excellent program for the Annual Convention at Rangeley. Matters of vital interest to every member of the Profession will be taken up in the House of Delegates and in the general meetings.

For those members who always attend the Conventions and who have made the Association strong for many years, I would say that these are critical times, and that your presence and wise counsel are more necessary than ever before—we know that we can count on you.

To those members who seldom attend, I would say that your presence and advice would be of great help to your Association at a time when organized medicine needs the active support of every member in facing problems of the immediate future.

Everyone who attends will certainly be able to combine pleasure with business, for Rangeley is a delightful place, and there are many notable features on the program.

Special arrangements are being made for the entertainment of the ladies, whom we hope to see in greater numbers than ever. They are also cordially invited to attend any or all meetings.

So we hope to see every member and his wife at Rangeley in June.

GEORGE L. PRATT, M. D.  
*President, Maine Medical Association.*

## Editorials

### *The Annual Meeting*

The program, contained in the current issue of the JOURNAL, is sufficient evidence that the Scientific Committee has prepared extremely well for the varied interests of the membership as a whole. The profession is faced to day, perhaps as never before, with situations and problems that demand careful study and consideration and many of them are far from matters pertaining to the actual practice of medicine and surgery. The deliberations and debates that will ensue in the House of Delegates will be of interest and they will be of importance. The more members who attend these sessions, the more who take part in the discussions, the more the rank and file of the profession will appreciate the seriousness of many conditions that confront us.

The vicious and unwarranted attacks on the American Medical Association, from those whose unselfish interests and motives can seriously be challenged, are nothing more or less than carefully prepared efforts to pave the way for legislation that will place the practice of medicine, hospitals, and all ancillary professions and services under direct bureaucratic control and domination. The proposed Wagner-George-Lea bill shows most conclusively a contemplated radical departure from anything that has been attempted or done in the aid of general medical care outside the charge of the federal government. There are many provisions in the act the adoption or endorsement of which might seriously be open to debate. Ostensibly the bill would seem as one generously providing government aid for certain communities without adequate hospital facilities but the bill also provides for government control. Government control should cause no doubt in the minds of any but the most simple as to what that means.

Discussing the National Physician's Committee, in the February issue of the JOURNAL, the President of the Maine Medical Association frankly and fairly asks some per-

tinent questions regarding the necessity and advisability of this committee, what it proposes to do and why and also the reasons for its existence. As the executive head of organized medicine in Maine this is exactly what he should do, what we expect him to do in the exercise of his office and as a practitioner keenly in sympathy with the problems that confront medicine and who is anxious they be solved correctly. No subject could be brought before the House of Delegates or an open meeting of more importance.

It is very gratifying to note that this subject is to be discussed by a member of the National Committee and the talk should, and undoubtedly will allow for questions from the floor, for while there is some controversy as to the advisability of this committee it certainly seems as if a presentation of the facts would remove all doubt but that it is a most excellent move.

It is understood that all the available space for the commercial and scientific exhibits have been allotted. This speaks well for the association in many ways. The tools of our "trade" increase with bewildering rapidity and many times it is extremely difficult to separate the wheat from the chaff. The opportunity to make personal contacts with our exhibitors is valuable. Pertinent and varied questions arise in our own minds and in the minds of interested colleagues. It is an education in itself to be able to obtain first-hand information from those who are qualified to give it and anxious that it be correct. Delegates from component State associations and allied professions are indeed welcome guests. It is a pleasant privilege to have them with us and a most cordial invitation is extended to attend any and all meetings and participate in the discussions. The speaker at the annual banquet needs no introduction to our membership. As an editor, as an interested and loyal member of his profession he will in the future, as he has in the past, defend and protect the rights of medicine to practice as a free and independent profession.



## *Army Experience for Physicians*

The wisdom underlying the plans of the War Department to afford civilian physicians, under thirty-five years of age, one year of active duty in the United States Army who will accept appointment in the Medical Reserve Corps is beyond question. In view of the madness and worse in some sections of the world the organization of our national defense should be complete in all details. To act or do otherwise is not only silly but is an open invitation for those of perverted minds to attempt to force their "ideals" on a nation having a far different concept on life and its opportunities.

Army Medicine, if the term may be permitted, differs greatly in many ways from the clinical problems of civilian life. The proposed year offers not only a post graduate internship in military medicine and surgery,

with rates of pay and assurances that must offer some attraction to the younger members of the profession, which of course is far, far from the main consideration, but present unequalled opportunities for medical men to learn the duties of an officer in a service becoming more and more highly specialized. Physicians accepting this service will do two things extremely worth while. They will discharge a duty of great civic importance; they will prepare themselves adequately to be a most essential part in the vast machine that must by necessity be put into operation in the event of disaster to our country. Already peaceful and kind peoples have had this misfortune, the result of being "neighbors" to countries imbued with the conviction that force is right, and the end is not yet. A prepared nation is in far less danger than one less fortunate and wise.

The announcement in the April, 1940, issue, page 113, conveys important information to those interested.

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## *Atmospheric Ragweed Pollen Survey for 1939*

### 1. *Portland.*

Glass slides were exposed for fifty consecutive days on the roof of the Maine General Hospital, under supervision of the pathologist, Dr. Warren. The highest pollen day was September 2. The number of "hay fever days" (count of 25+) was 10. The pollen index (Durham) was 14.

### 2. *Camden.*

The receiving station was placed at the CCC camp under supervision of the Maine Health Bureau. The fifty-day season, August 10 to September 28, showed the highest pollen day September 3. The number of hay fever days was 17. The pollen index was 26. Surprised by this high count, an investigation was made before publication. Mr. O. C. Durham, after a re-check, wrote: "The Camden figures are higher than anything we have had from Maine. . . . How do you account for this?"

Untilled fields of ragweed were reported

surrounding the receiving station. The Camden Chamber of Commerce reports: "Ragweed flourished in the greatest luxuriance around the barracks of the CCC camp where the pollen count was taken. We noticed more ragweed at this point, where the receiving station was located, than in any other part of the township."

The Chamber of Commerce would like the survey to be repeated, either in a more representative location, or possibly in the same place. As the CCC camp has indicated its willingness to try to eradicate the ragweed this year, the pollen reception could be considered at the camp location. Until a re-check is thus made, it would appear that the above figures should not be considered conclusive for the town of Camden.

Soils must be kept busy with some worthwhile cover—otherwise ragweed. Unbroken turf does not grow ragweed.

Signed,

- CHARLES B. SYLVESTER, M. D.

## Councilor Reports

### *Report of Councilor, First District*

*To the Officers and Members of the Maine Medical Association:*

Annual report of Cumberland and York County Societies.

#### CUMBERLAND COUNTY

Active Membership—163.

Honorary Membership—7.

New Members—Gordon N. Johnson, M. D., Portland; Victor Simecek, M. D., Brunswick; Philip Gregory, M. D., Boothbay Harbor; Joseph E. Porter, M. D., Portland; Milton S. Thompson, M. D., Portland; Harry Christiansen, M. D., Portland.

Deceased—Carl C. Corson, M. D., Portland.

Officers—President, Luther Brown, M. D., Portland; Vice President, Howard Hamblen, M. D., Windham; Secretary and Treasurer, Donald Daniels, M. D., Portland.

Board of Councillors—Charles Hunt, M. D., Portland; Harry Emery, M. D., Portland; George Tibbetts, M. D., Portland.

Delegates to State Medical Society—Frank Smith, M. D., Westbrook; E. H. Drake, M. D., Portland; Francis Dooley, M. D., Portland; Ralph Heifetz, M. D., Portland; Theodore Bramhall, M. D., Portland; Franklin Ferguson, M. D., Portland; Edward Greco, M. D., Portland.

Alternates—Louis Hills, M. D., Westbrook; Eugene O'Donnell, M. D., Portland; Thor Miller, M. D., Westbrook; Gordon Johnson, M. D., Portland; Eugene MacDonald, M. D., Portland; William Needelman, M. D., Portland; Deforest Weeks, M. D., Portland.

Legislative Committee — Charles Sylvester, M. D., Portland.

Committee on Outside Relations—Roland Moore, M. D., Portland; Phillip McCrum, M. D., Portland; Richard Hawkes, M. D., Portland.

Society Meetings were held on

November 9, 1939 — Leland Powers of Boston, who has had many years' experience defending malpractice suits, spoke on that subject. A goodly number of legal brethren were present.

December 8, 1939—Grantley Taylor, M. D., Boston, "Carcinoma of the Breast."

February 16, 1940, Pneumonia Panel, headed by Frederick T. Hill, M. D., Waterville.

April 25, 1940—Herbert Kelly, M. D., Associate Professor, University of Pennsylvania, "Important Phases of Nutrition and Vitamin Deficiencies."

Meetings were well attended and papers were interesting with much favorable discussion.

Fifty-year medal qualification — Henry Herbert Brock, M. D., one of Maine's most noted surgeons in the last half century.

Dry Clinics were held at the Maine General Hospital in the afternoon before each of the Society Meetings. These Clinics have much teaching value, and a lot of credit is due Dr. George Cummings and his assistants for the time and effort spent in their preparation.

#### YORK COUNTY

Active Membership—47.

Honorary Membership—1.

New Members—Ralph S. Belmont, M. D., Sanford; George I. Gould, M. D., Biddeford; William F. Mahoney, M. D., Saco; Leon Nemon, M. D., Old Orchard and Portland.

Deceased—Henry L. Durgin, M. D., South Eliot, Maine.

Moved out of County—Dana B. Mayo, M. D., from South Eliot, Maine; A. W. Winch, M. D., from Sanford.

Officers—President, W. T. Roussin, M. D., Biddeford; Vice President, O. B. Head, M. D., Sanford; Secretary and Treasurer, C. W. Kinghorn, M. D., Kittery.



Board of Censors—Paul S. Hill, Jr., M. D., 1940, Saco; E. C. Cook, M. D., 1941, York; J. R. Laroche, M. D., 1942, Biddeford.

Delegates to the State Medical Society—C. W. Kinghorn, M. D., Kittery; Paul S. Hill, M. D., Saco.

Alternates—J. H. MacDonald, M. D., Kennebunk; Carl E. Richards, M. D., Alfred.

Fifty-Year Medal Qualification—E. E. Shapleigh, M. D., Kittery.

Quarterly meetings were held as follows:

August 26, 1939—Joint Clam Bake and Picnic with Cumberland County Society.

October 11, 1939—Hill Croft Inn, York Harbor, Maine; Speaker, William J. Buckley, M. D.; Medical Examiner Suffolk County, Mass.

January 10, 1940—Goodall Hospital, Sanford, Maine, Panel Discussion; Cardio-Vascular diseases.

April 3, 1940—Kennebunk Inn, Kennebunk, Maine, Panel Discussion, Head Injuries.

All of the meetings, with the exception of the Clam Bake, were well attended. The attendance this year was much improved over previous years. The programs were much better, and the doctors of the County really think that they are now getting something out of the meetings.

Respectfully submitted,

S. A. COBB, M. D.,  
*Councilor, First District.*

## ***Report of Councilor, Second District***

As Councilor for the Second District, I submit the following report:

### **OXFORD COUNTY MEDICAL SOCIETY**

The Oxford County Medical Society held one regular meeting on October 25, 1939, which was the annual meeting at which the following officers were elected: William T. Rowe, M. D., President; C. W. Eastman, M.

D., Vice President; and James S. Sturtevant, M. D., Secretary-Treasurer. At this meeting, L. C. Montgomery, M. D., Professor of Medicine at McGill Medical School, gave an illustrated lecture on *The Diagnosis and Treatment of Pneumonia*.

There has been one special meeting for the acceptance of new members. There has been a gain of one in membership for the past year, the membership now being 37.

### **ANDROSCOGGIN COUNTY MEDICAL SOCIETY**

The Androscoggin County Medical Society held eight regular meetings and an outing at Poland Springs during 1939, and four meetings this year so far with an outing at Poland Springs planned for the May meeting. The programs for the most part have been put on by Maine doctors and the panels sponsored by the State Association have been used on several occasions.

Since the beginning of 1939, five members have been lost, two moving away, two deaths, and one resignation, but there have been five new members so that the total membership remains the same, namely 77.

### **FRANKLIN COUNTY MEDICAL SOCIETY**

The Franklin County Medical Society has held four meetings which include the Annual Outing in August, 1939, a meeting December 6, 1939, at which the Panel Discussion on Pneumonia was presented, a meeting February 8, 1940, with a program of Medical Films, and a meeting April 29, 1940, at which Edwin E. Gehring, M. D., of Portland, was guest speaker.

Respectfully submitted,

EUGENE M. McCARTY,  
*Councilor, Second District.*

## ***Report of Councilor, Third District***

As Councilor of the Third District, I submit the following report:

Sagadahoc County Society has a membership of seventeen in good standing. The

usual number of meetings have been held, the programs have been well selected and the meetings have been well attended.

The Knox County Society has a membership of thirty-one in good standing. Six meetings have been held this year with a better than usual attendance.

The meetings have been held in the evening following a Staff Teaching Clinic held at the Knox County Hospital in the afternoon.

This arrangement has afforded exceptionally interesting meetings and has attracted frequent guests from the Waldo and Sagadahoc County Societies.

I believe this District has enjoyed the best year ever.

Respectfully submitted,

WM. ELLINGWOOD, M. D.,  
*Councilor, Third District.*

### ***Report of Councilor, Fourth District***

*To the Members of the Maine Medical Association:*

It gives me great pleasure to report that all societies in the Fourth District have held regular and interesting meetings during the past year.

All programs have been interesting and instructive with an unusual number of members in attendance.

We are all looking forward to the Annual Session at Rangeley Lakes where a grand program has been prepared for our instruction and entertainment.

CARL H. STEVENS,  
*Councilor, Fourth District.*

### ***Report of Councilor, Fifth District***

The Washington County Society held its usual three meetings during the year. They were successfully and well attended. Their

annual meeting for the election of officers will be held this month.

New life, of autogenous origin, has been injected into the Hancock County Society. President Ralph W. Wakefield in his unvarying agreeable way, holds every member responsible for appearing at the regular meetings of the society. This method not only seems to be effective in raising attendance to a satisfactory level but interest in individual meetings has been keen and promising. Six meetings were held during the year.

R. BLISS, M. D.,  
*Councilor, Fifth District.*

### ***Report of Councilor, Sixth District***

*To the Members of the Maine Medical Association:*

During the past year as Councilor of the Sixth District, I have had the pleasure—and it was a real pleasure—of visiting the various societies in this district.

Each County Society seems to be getting along well and the meetings were well attended. The programs were well arranged and interesting. At one of the Penobscot County meetings, Doctor Craig showed me the new addition to the Eastern Maine General Hospital. The doctors who have the privilege of working there are to be envied.

As I am finishing my work as Councilor this year, I desire to take this opportunity of thanking the various societies for the many pleasant and instructive meetings I have enjoyed with them, for the entertainment they have so cordially extended and for their co-operation in the work of the Maine Medical Association.

P. L. B. EBBETT,  
*Councilor, Sixth District.*

Every war is a national calamity, whether victorious or not — General von Moltke — Except the war on tuberculosis.



## Committee Reports

### *Standing Committees*

#### *Cancer Committee, 1939-1940*

The Cancer Committee has not sponsored any special or new projects during the past year. Even more than in past years the work of the Committee has merged with the activities of the Women's Field Army. Members of the Cancer Committee are also members of the Executive Committee of the Field Army and, as such, have functioned in the various Cancer Clinics and cancer activities thruout the State.

Established Cancer Clinics have continued at the several Hospitals thruout the State. The question of starting new diagnostic centers in the northern part of the State has not yet been answered.

A panel group is organized and at the disposal of program committees of County societies. This service has not been used.

Most of our professional activities should find an outlet in services rendered to the Cancer Clinics. I suggest that heads of these groups meet for the purpose of organizing all the Clinics with methods of procedure as uniform as possible thruout the State. In this way, patients who seek the Clinics as a result of the educational work of the Women's Field Army will be cared for in the same general way and future statistical studies will be made more accurate and valuable.

FORREST B. AMES, M. D.,  
*Chairman Cancer Committee,  
Maine Medical Association.*

#### *Public Relations Committee*

The Chairman of the Public Relations Committee of the Maine Medical Association has had one meeting at which all members were present.

The various angles of our Public Relations

were discussed and a subcommittee of two were appointed to represent the full committee on matters which it might be difficult to get the committee as a whole together.

One member of the committee, Dr. F. T. Hill, with the Secretary of the State Association, have been active in improving the relationship between the Medical men of Maine and the Veterans Facilities at Togus. Each member of the Association has a definite duty toward the patient and toward the Facilities at Togus. Town officials, welfare agencies and, in one or two instances, physicians have advised moving patients to Togus, which proved to be wrong advice as patients have either died on the way or very soon after arrival at the Facility.

The committee requests that each physician may best preserve our standing as Medical Men and as an Association by being careful in this matter.

Respectfully submitted,

W. E. KERSHNER,  
*Chairman.*

#### *Publicity Committee*

*To the Officers and Members of the Maine Medical Association:*

The Chairman of the Publicity Committee reports that the only official releases for newspaper publication during the year were the notices and programs of the Clinical Session held at Waterville, October 25, 26, 1939.

The Council wishes to maintain the policy of having all publicity emanate from the Publicity Committee and thus avoid unauthorized publication of Association affairs.

THOMAS A. FOSTER, M. D.,  
*Chairman Publicity Committee.*

## *Special Committees*

### *Advisory Committee on Syphilis Control*

The Venereal Disease Advisory Committee of the Maine Medical Association met in the office of the Director of Health, on July 21, 1939. Members present were Dr. Foster, Dr. Carter, Dr. Morrell, and Dr. Mitchell, the Director of Health.

Several matters were discussed, and it was decided that it was desirable to have a uniform system of records of all clinic treatments, with duplicate copy at the office of the Bureau of Health.

It was also recommended that drugs distributed by the Bureau of Health to physicians and clinics, for treatment of syphilis, be limited in kind to the following preparations:

- Mercury Cyanide
- Sulpharsphenamine
- Tryparsamide
- Bismuth Subsalicylate in Oil
- Bismarsen
- Distilled Water
- Mapharsen
- Neo-Arsphenamine

A second meeting was held at the office of the Director of the Bureau of Health on April 5, 1940, for the purpose of checking the supply of anti-syphilitic drugs.

In going over the records at the Bureau, a 12% increase in blood examinations was noted, during the present fiscal year.

Clinics have been established to the total number of twenty-nine. Clinics are now located in the following places:

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston (two clinics), Millinocket, Old Town, Portland (three clinics), Presque Isle, Rockland, Rumford, Sanford, Skowhegan, Waterville, Wilton and Winthrop.

BENJAMIN B. FOSTER,  
*Chairman Advisory Committee  
on Syphilis Control.*

### *Committee on Problems of Health Insurance and State Medicine*

As Chairman of the Committee on Problems of Health Insurance and State Medicine, I have the honor to report that the Committee has not had a meeting. There seemed to be no immediate problems confronting us and no new angles which have not been handled by the parent body, the American Medical Association.

Respectfully submitted.

W. E. KERSHNER,  
*Chairman.*

### *Committee on Graduate Education*

*To the President and Members of the Maine Medical Association:*

Consistent progress seems to have been made during the past year in the further development of a Continuation Program of Education. Your committee has had available for presentation at county society meetings panel discussions on "Pneumonia," "Cardio-Renal Disease," "Fractures," "Acute Appendicitis," "Thoracic Surgery," "Blood Dyscrasias," and "Skull Injuries." In addition a panel presenting clinico-pathological discussions has been organized by Dr. Gottlieb. These panels have been utilized by a number of the different county societies and seem to have been well received. It is the desire of the committee to furnish programs on any subjects which might be desired by the different county societies. Requests for such subjects will receive the prompt attention of the committee.

The Graduate Fellowships, provided through the Bingham Associates and the Commonwealth Fund, are fulfilling a much needed purpose and are being widely utilized. The committee has coöperated with the Directors of these two Foundations, endeavoring to see to it that these fellowships are allocated where most urgently needed.



The extension course of lectures provided by the Central Maine General Hospital at Lewiston has been most valuable and served a most useful purpose in bringing into the State teachers of national repute.

Perhaps the most encouraging feature of the whole program is the gradual development of staff programs in individual hospitals. These are more and more becoming of an educational nature. Ultimately the community hospital must assume the responsibility for carrying on this Continuation Program of Education. After all self-education is of the greatest value, and accomplishes the most in the development of the individual physician.

Your committee actively coöperated in the New England Post Graduate Assembly last Fall, and has been represented at the committee meetings held during the past year in preparation for the Assembly to be held next Fall. It is hoped that there will be an even larger attendance of our members at this coming session.

The expenses of the committee to date have been \$131.66. This was largely for expenses of the panel discussion on "Anaesthesia" at the Fall Clinical Session.

Early in the Fall a questionnaire was sent to the county secretaries requesting information as to the desires of the different county societies in regard to our program. Little information was received from these questionnaires, due to incomplete returns on the part of the secretaries.

The activities of our State Association in Graduate Education was a subject of a most favorable report rendered by the Council on Medical Education and Hospitals of the American Medical Association.

Recommendations:—

Your committee recommends that, (1) the present program be continued, (2) that the State Association continue to participate in New England Post Graduate Assembly, (3) that the individual community hospitals be encouraged to develop a teaching program as a part of their staff activities, and (4) lastly that greater coördination be developed between the annual Summer and Fall meetings of the Association, and the work of this committee. It may seem desirable to do away with the Fall Clinical Session and devote more of our efforts towards the furtherance

of the New England Post Graduate Assembly. At the present time the committee is not ready to take a definite stand on this matter.

Respectfully submitted,

EUGENE E. HOLT, JR.,

JULIUS GOTTLIEB,

FRANK H. JACKSON,

LEROY H. SMITH,

FREDERICK T. HILL, *Chairman.*

May 1, 1940.

### *Committee on Maternal Welfare*

This committee has continued its study of maternal and infant mortality in Maine, and has noted with satisfaction that a marked improvement has occurred. A start has been made toward the establishment of new prenatal clinics to serve the rural population. Obstetrical motion picture films have been furnished, through the State Bureau of Health, for the instruction of nurses in hospitals, and such films are available, upon request, to medical instructors of classes in obstetrics. Questionnaires have been sent out to various physicians in an attempt to accurately classify cases in which the cause of death may appear doubtful. Prompt response, with full information, from those receiving such questionnaires will greatly facilitate the work of the committee; needless to say, all information received in this way is regarded as strictly confidential, and is revealed to nobody except the committee.

This work is painstaking and slow, and not productive of immediate or startling results, but it is felt that some progress has been made, and therefore it is urged that this or some similar committee be continued.

ROLAND B. MOORE,

*Chairman.*

Five times out of six, mothers with untreated syphilis bear dead or diseased babies, according to the statement issued by the Public Health Service.

In pointing out that 60,000 syphilitic babies are born every year, the Federal health authorities emphasize the tragic but needless consequences of neglecting to give syphilis tests and treatments to prospective mothers.

## *Report of the Secretary-Treasurer*

As Secretary, I am pleased to submit the following annual report:

There are 688 active members in good standing in the Association, and 24 Honorary Members. We have added to our roster 38 new members and have lost 27; 19 through death and 8 who have moved out of the State.

In accordance with our By-Laws, Chapter VIII, Section I, we dropped, in April, 20 members for non-payment of dues. Five have been reinstated.

The following County Societies are to be commended for 100% payment of dues; Franklin, Hancock, Knox, Oxford, Penobscot, Piscataquis, Sagadahoc, Somerset and Waldo.

The Yearbook of Obstetrics and Gynecology and fillers for Brenneman's Pediatrics have been purchased for the Spalding Memorial Library at the Maine General Hospital, Portland, at a cost of \$16.75 from the unexpended income of the Thayer Library Fund.

The 1939 fall clinical session was held at Waterville, October 25th and 26th. Clinics were presented, each day, at the Central Maine Sanatorium, Elm City Hospital, Sisters' Hospital and Thayer Hospital. Wednesday evening, the Committee on Graduate Education under the chairmanship of Frederick T. Hill, M. D., presented a panel discussion on Modern Anesthesia. Participating in this discussion which was summarized by Puhel J. Flagg, M. D., of New York City, were Howard M. Chute, M. D., Boston; M. Fletcher Eades, M. D., Boston; Sidney C. Wiggin, M. D., Boston; and Gilbert Clapper-ton, M. D., Lewiston. Thursday evening was

the regular meeting of the Kennebec County Medical Association. Elliott C. Joslin, M. D., of Boston, Guest Speaker, spoke on Diabetes.

The 88th annual session will be held at the Rangeley Lake Hotel, Rangeley Lakes, Maine, June 23rd, 24th, and 25th. An excellent program, to be found elsewhere in this issue, has been prepared by the Scientific Committee of which Merrill S. F. Greene, M. D., of Lewiston, is Chairman. The report of the Council for the year will be presented by the Chairman, P. L. B. Ebbett, M. D., of Houlton, at the first meeting of the House of Delegates, Sunday, June 23rd, at 4.30 P. M.

The Association will have the privilege of presenting Fifty-Year Service Medals to Frederick B. Adams, M. D., Rockland; Henry H. Brock, M. D., Portland, and Edward E. Shapleigh, M. D., Kittery.

All space allocated for Commercial Exhibits has been reserved and I sincerely hope that due appreciation of this support will be shown by each and every member present.

Your Secretary wishes to express his appreciation for the coöperation of the county secretaries, councilors, and other officers of the Association in carrying on the work of the Association during the past year.

The books of the Association and JOURNAL were closed and audited as of May 31, 1940. The Auditor's Report will be found on Page 187.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,  
*Secretary-Treasurer.*

May 31, 1940.

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*R. Bliss—Continued from page 162*

ing exorbitant fees for his benefit. The inexcusable article has no other touch of humor to relieve its sordid theme.

That an able surgeon stepping down from a trail pure and white with notable achievement should deliberately seek to blacken and

smear the road over which the next generation of young men must travel, at least illustrates another way of bearing up under the strain of retirement.

No penalty is severe enough for the unclean bird who literally befouls his own nest.



## *Report of the Necrologist,* *1939-1940*

Maine Medical Association deceased members since May 31, 1939:

Bisbee, Charles Melville, Rumford  
Bryant, Bertram Lewis, Bangor  
Cole, Frederick Melvin, Gardiner  
Corson, Carl Cutting, Portland  
Dickison, Thomas S., Houlton  
Durgin, Henry Irwin, South Eliot  
Emerson, Oscar Rodney, Newport  
Hathaway, William R., Milo.  
Kilgore, Albert Ervin, Brooks  
Leijonberg, Frans, Liberty  
Neal, George Arthur, Southwest Harbor

Nichols, John Witham, Farmington  
Pelletier, Joseph J., Lewiston  
Potter, John Garfield, Houlton  
Redman, Samuel J., Dexter  
Sawyer, Alfred Loomis, Fort Fairfield  
Shaw, Arthur A., Clinton  
Sprince, Henry, Lewiston  
Totman, Virgil Connor, Oakland  
Trickey, Winfield Benjamin, Pittsfield

Respectfully submitted,

FREDERICK R. CARTER, M. D.,  
*Necrologist.*

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### *Warning\**

Numerous complaints have reached the Registry of Medical Technologists regarding the activities of a Mr. C. A. Bartholomew of Red Bank, New Jersey, who has launched an organization styled the "American Medical Technologists," which purports to issue certificates of qualification. It is soliciting membership especially among graduates of non-approved schools or those who are ineligible for examination by the standards of the Registry.

Bartholomew has never taken the Registry examination but assumes the designation of M. T. after his name in his drive for membership. He has also presumed to give approval to a number of commercial schools which are not approved by the Registry.

This enterprise is not sponsored by any scientific society but appears to be motivated by commercial aspects, as a \$5.00 registration fee is solicited from those desiring to join.

To obviate any confusion of this unauthorized movement with the legitimate work of the Registry of Medical Technologists of the American Society of Clinical Pathologists, this warning is issued to all interested in maintaining high standards to disseminate the true information to the unwary about the standing of the so-called "American Medical Technologists."

\* From the *American Journal of Clinical Pathology*, Volume 10, Number 3, March, 1940, page 261.

## County News and Notes

### Cumberland

A clinic and dinner meeting of the Cumberland County Medical Society was held, Thursday, May 23, 1940, at Portland, Maine.

George O. Cummings, M. D., presided at the Clinic at the Maine General Hospital at 5.00 P. M. The following cases were presented:

Tumor Clinic Statistics—Albert D. Foster, M. D., Tumor Clinic.

Histological Grading of Tumors—Joseph E. Porter, M. D., Pathological Dept.

Methods of and Indications for Biopsy—Mortimer Warren, M. D., Pathological Dept.

Pre- and Post-operative Demonstration of Skeletal Metastasis—Langdon T. Thaxter, M. D., X-Ray Dept.

Intra-oral X-Ray in Cancer of the Mouth—Jack Spencer, M. D., X-Ray Dept.

Radium in Treatment of Cancer—William Holt, M. D., Director Radium Therapy.

Relief of Pain in Cancer—H. E. Macdonald, M. D.  
Cancer of the Prostate—Clinton N. Peters, M. D., Urological Service.

Bronchiogenic Carcinoma—E. H. Drake, M. D., Medical Service.

Cancer of Rectum—Carl M. Robinson, M. D., Surgical Service.

Five Year Review of Cancer of Uterus—Carl E. Dunham, M. D., Gynecological Service.

Dinner at the Lafayette Hotel at 7.00 P. M. was followed by a business meeting and the evening program.

Dr. Clarence C. Little of Bar Harbor, guest speaker, spoke on *A Review of Cancer Control Programs in Other States with a Discussion of Changes in Our Own State Program*.

DONALD H. DANIELS, M. D.,  
Secretary.

### Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, May 7, 1940, at 8.15 P. M. Forty-seven members and one guest were present.

Dr. G. E. C. Logan was elected to membership.

Mr. E. P. Getchell was made an honorary member of the Club.

A committee consisting of Drs. E. A. Greco, L. A. Asali, C. L. Cragin, G. I. Geer, and A. E. Ottum was appointed to make arrangements for the Annual Outing in June.

Dr. E. E. Holt, Jr., was Chairman of the Panel conducted on *Head Injuries*. The topics discussed were:

First Aid—Dr. F. W. Hanlon.

Neurological Aspects—Dr. H. E. Macdonald.

Eye Manifestations—Dr. E. E. Holt, Jr.

Surgical Aspects—Dr. C. H. Hunt.

Drs. S. J. Beach, P. P. Thompson, L. T. Thaxter, G. N. Johnson, I. M. Webber, J. A. Parker and C. B. Sylvester participated in the discussion.

Respectfully submitted,

ALICE WHITTIER, Secretary.

### Kennebec

A meeting of the Kennebec County Medical Association was held at the Veterans' Administration Facility, Togus, Maine, Thursday, May 16, 1940.

Clinical Session at 5.00 P. M., which was presided over by Blynn O. Goodrich, M. D., President of the Association:

1. Abdominal Allergy—N. H. Badaines, M. D.

2. Auricular Fibrillation with Quinidine—H. T. Perkins, M. D.

3. Pulmonary Diseases from an X-ray Standpoint—A. L. Fitzporter, M. D.

4. Ureteral Calculus Post Operative Complication Pelvic Abscess—F. T. Williams, M. D.

5. Internal Ophthalmoplegia and Paralytic Squint—H. A. Goalwin, M. D.

6. Interesting Cases from a Diagnostic and Therapeutic Standpoint—J. E. Wheeler, M. D.

7. Remote Control of Nephrolithiasis—Henry Ladd Stickney, M. D.

Dinner at 6.30 P. M., which was followed by a business meeting.

Minutes of the last meeting were read and approved.

Paul D. Giddings, M. D., of Augusta, Maine, was elected to membership.

Resolutions on the recent death of Frederick M. Cole, M. D., of Gardiner, were read by Frank B. Bull, M. D. Resolved that a copy of these resolutions be sent to the bereaved family and a copy be spread on the records of the Kennebec County Medical Association.

The speaker of the evening was Joe Vincent Meigs, M. D., of Boston, Mass., whose subject was "Female Endocrinology." This was an especially interesting paper, well presented and brought out much general discussion. The meeting was well attended, 45 members and guests being present.

FREDERICK R. CARTER, Secretary.

### New Members

#### Kennebec

Paul D. Giddings, M. D., Augusta, Maine.

### Change of Address

#### Penobscot

Frederick D. Sherrard, M. D.

From Winn, Maine

To Mattawamkeag, Maine.

#### Cumberland

Louis A. Asali, M. D.

From 690 Congress Street, Portland, Maine

To 29 Deering Street, Portland, Maine.

### For Sale

A large and varied assortment of Surgical Instruments at a bargain. Call in person.

HENRY LADD STICKNEY, M. D.,  
Togus, Maine.



## Necrologies

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### *Bertram L. Bryant, M. D., 1872-1940*

Doctor Bertram L. Bryant of Bangor, an outstanding man in the medical profession for many years, died Friday, May 3rd, at the Eastern Maine General Hospital after a period of ill health of over a year, followed by an attack of pneumonia.

News of his decease caused general regret among the medical men and many other friends.

Doctor Allan Craig, medical director of the Eastern Maine General Hospital, offered the following tribute to the memory of Doctor Bryant.

"In the passing of Bertram L. Bryant we, at the Eastern Maine General Hospital have lost a dear friend and wise counselor. Through the years of development and growth of the Hospital, Doctor Bryant has been outstanding in his efforts in promoting the welfare of the Institution. He was always to be found in the forefront of progressive developments. Personally I deeply feel the loss of a wise councilor and friend."

Doctor Bryant was born in Bethel in 1872, a son of Benjamin and Ellen (Davis) Bryant. He was educated at Gould Academy, Bowdoin College, where he secured his A. B. and M. A., class of 1895, and Bowdoin Medical School, from which he was graduated in 1899. He was a member of the Theta Delta Chi and Phi Beta Kappa.

He came to Bangor soon after leaving medical school and in a short time had secured a place of prominence in the medical profession. He was established as pathologist at the Eastern Maine General Hospital in 1905 and became visiting physician, chief of the medical staff, president of the Anti-Tuberculosis Association, secretary of the Maine Medical Association, delegate to the American Medical Association and was consulting physician to various hospitals. He also contributed to medical journals some articles of note which attracted favorable attention. He was a member of the New England Medical Council and at one time was president of the Penobscot Valley Bowdoin College Alumni Association.

Doctor Bryant served on the Bangor water board and was a member of the Rotary Club, Condukeag Canoe and Country Club, the Tarratine

Club and Penobscot Valley Country Club. He was an attendant at All Souls Church.

He had an attractive personality and a genial nature which won friends and he was welcomed socially, while in his profession he was recognized as a man of rare attainments. He retained his active interest in the hospital and tuberculosis association to the last.

He is survived by his wife, Lillian True Bryant, of Bethel; a daughter, Mrs. Vachel L. Wakefield of Bangor; two brothers, Frank D. Bryant and Dr. Mason D. Bryant of Lowell, Massachusetts; two nephews, Frank K. Bryant and Mason David Bryant, Jr.; and a cousin, Margaret A. Bryant of Bangor.

Funeral services were held at All Souls Church, Sunday, May 5th, at 2.30 P. M.

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### *Frederick M. Cole, M. D., 1879-1940*

On Sunday, May 5, 1940, Doctor Cole died suddenly at his home in Gardiner, Maine.

He was born in West Gardiner, April 6, 1879, the son of Arthur S. and Margaret (McCloud) Cole. He attended Gardiner schools and was graduated from the Nichols Latin School in Lewiston in 1900. He attended the Baltimore Medical School in Baltimore, Maryland, for three years and was graduated from the Boston College of Physicians and Surgeons in 1908.

Doctor Cole had been a member of the staff of the Gardiner General Hospital since its founding in 1918, had served as alderman and city health officer and was the school physician at the time of his death. He was a member of the Kennebec County Medical Association, the Maine Medical Association, and the American Medical Association, and all the Masonic Lodges.

Survivors are his wife, a son, Archie B. Cole of Littleton, New Hampshire; two brothers, Archie D. Cole of West Gardiner, and Russell C. Cole of Woburn, Massachusetts; a sister, Mrs. Alice Hutchinson of South Manchester, Connecticut, and a granddaughter.

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**PROGRAM**

88th ANNUAL SESSION

MAINE MEDICAL ASSOCIATION

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JUNE 23, 24, 25, 1940

RANGELEY LAKE HOTEL

RANGELEY LAKE, MAINE

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PROGRAM ARRANGED  
BY THE  
SCIENTIFIC COMMITTEE



M. S. F. GREENE  
Chairman



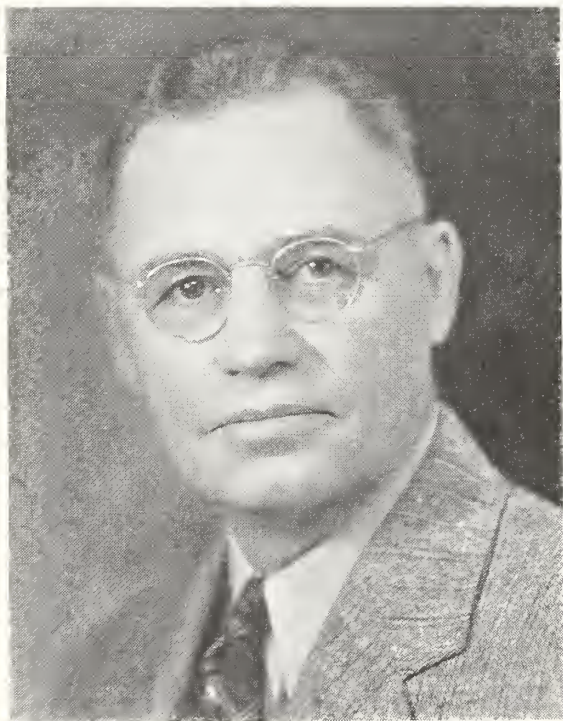
Members  
SCIENTIFIC COMMITTEE



H. C. SCRIBNER



MORTIMER WARREN



CURRIER C. WEYMOUTH



FREDERICK R. CARTER, Secretary



## Official Program

Arranged by Scientific Committee  
MERRILL S. F. GREENE, M. D., *Chairman*

### INFORMATION

Registration headquarters will be in the Lobby of the Rangeley Lake Hotel. Every member and guest is requested to register promptly on arrival.

All emergency calls should be referred to the Association registration desk. Be assured that all emergency calls will be given prompt and efficient service.

*All papers read before this Association shall be its property for publication in THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION, and when read shall be deposited with the Secretary.*

#### SUNDAY, JUNE 23, 1940

4.30 P. M.

First meeting of the House of Delegates.

8.30 P. M.

Entertainment for the Doctors and their wives by Mr. Frank Lane, Boston, Mass., with his unusual skill at legerdemain.

#### MONDAY, JUNE 24, 1940

Morning Session

9.30 A. M.-12.00 M.

Conferences

##### I

#### EYE

WILLIAM H. CHAFFERS, M. D.,  
Lewiston, Me., *Chairman*

Some Oculo-Motor Disturbances,  
David G. Cogan, M. D., Cambridge, Mass.  
The Diagnosis and Treatment of Some Corneal Conditions,  
Trygve Gundersen, M. D., Boston, Mass.

##### II

#### PATHOLOGICAL

MORTIMER WARREN, M. D.,  
Portland, Me., *Chairman*

1. Discussion of Laboratory Methods in Tuberculosis Work,  
Lester Adams, M. D., Hebron, Me.
2. Discussion of Medical Mycology,  
Leon Babalian, M. D., Portland, Me.
3. Demonstration of Specimens, Slides, and Case Reports.
4. Consideration of Advisability of a State Association of Pathologists.

##### III

#### SURGICAL

HARRISON L. ROBINSON, M. D.,  
Bangor, Me., *Chairman*

Round Table discussion of the Acute Abdomen and Other Surgical Emergencies.

##### IV

#### ANAESTHESIA

MAURICE E. LORD, M. D.,  
Skowhegan, Me., *Chairman*

1. Anaesthesia from the Surgeon's Viewpoint,  
George E. Young, M. D., F. A. C. S.,  
Skowhegan, Me.

2. Anaesthesia Then and Now,  
Samuel E. Sawyer, M. D., Chief Anaesthetist,  
Ste. Marie General Hospital, Lewiston, Me.
3. Why Should the Physician Anaesthetist be Employed as Chief of the Anaesthesia Department in Every Hospital,  
Edwin M. Fuller, Jr., M. D., Bath, Me.
4. Anaesthetic Emergencies, Complications and Treatment,  
Eugene Brown, M. D., Bangor, Me.
5. Anaesthetic Risks with Reference to Choice of Agent,  
Gilbert Clapperton, M. D., Chief Anaesthetist,  
Central Maine General Hospital, Lewiston, Me.
6. Pentothal Sodium; Its Field of Usefulness,  
Ralph M. Tovell, M. D., Anaesthetist,  
Hartford Hospital, Hartford, Conn.
7. Anaesthesia and Disturbed Physiology,  
Meyer Saklad, M. D., Director of Anaesthesia,  
Rhode Island Hospital, Providence, R. I.

##### V

#### MEDICAL

JAMES REED, M. D.,  
Farmington, Me., *Chairman*

1. Diabetes; The Problem from the Standpoint of the Internist,  
Sven M. Gundersen, M. D.,  
Hitchcock Clinic, Hanover, N. H.  
*Discussion:*  
Harry S. Emery, M. D., Portland, Me.
2. Diabetes; The Problem from the Standpoint of the Surgeon,  
Harry Brinkman, M. D., Wilton, Me.  
*Discussion:*  
Isaac M. Webber, M. D., Portland, Me.
3. *General Discussion to be directed by*  
Elton R. Blaisdell, M. D., Portland, Me.

##### VI

#### OBSTETRICAL

ROLAND B. MOORE, M. D.,  
Portland, Me., *Chairman*

1. Indications For and Some Methods of Induction of Labor,  
Leroy C. Gross, M. D., Lewiston, Me.
2. Routine Episiotomy and Use of Low Forceps in Primiparae,  
Clarence Emery, Jr., M. D., Bangor, Me.
3. Management of Posterior Positions,  
E. Allan McLean, M. D., Portland, Me.
4. The time remaining will be devoted to a general discussion of obstetrical problems.

##### VII

#### PEDIATRICS

ALBERT W. FELLOWS, M. D.,  
Bangor, Me., *Chairman*

Panel Discussion of Pediatric Therapeutics.

1. The Newer Remedies and Administration of Fluids,  
Fred P. Webster, M. D., Portland, Me.
2. Symptomatic Treatment,  
Clair S. Bowman, M. D., Waterville, Me.
3. Immunization and Specific Sera,  
Alice S. Whittier, M. D., Portland, Me.
4. General Principles and Technique of Medication,  
Albert W. Fellows, M. D., Bangor, Me.



**Luncheon  
12.30 P. M.**

Tables will be reserved for reunions of alumni of Boston University, Johns Hopkins, Bowdoin, McGill, University of Vermont, Tufts, Yale and Harvard Medical Schools, and members of the Tumor Clinics.

**Afternoon Session  
2.00-5.00 P. M.  
Clinico-Pathological Conference  
JULIUS GOTTLIEB, M. D.,  
Lewiston, Me., *Chairman***

The Clinico-Pathological conference will consist of case presentations as indicated below with discussions opened by a physician or surgeon to whom the pathological diagnosis is unknown. Following discussion the pathologist will present the finding as seen at postmortem.

The first five papers will include complete presentation of the case history and follow-up studies at the respective hospitals. The last series, if time permits, will be presented in synopsis forms together with the pathological findings. General discussions will be limited to five minutes.

Reginald Fitz, M. D., Assistant Dean, Harvard Medical School, will guide and summarize the discussions prior to the disclosures of the pathological findings.

1. A male age 57 complains of pain in back of head, loss of vision of right eye, dyspnea on exertion and fatigue of six weeks' duration.

*Presented by:*

Richard P. Laney, M. D., Skowhegan, Me.

*Discussions Opened by:*

Theodore E. Hardy, M. D., Waterville, Me.,  
and William B. Dameshek, M. D., Boston, Mass.

*Pathological Presentation by:*

Julius Gottlieb, M. D., Lewiston, Me.

*Pathological Discussion by:*

H. E. MacMahon, M. D., Boston, Mass.

2. A male age 52 with syphilis of long duration presented himself with cellulitis of right foot.

*Case Presented by:*

Henry C. Knowlton, M. D., Bangor, Me.

*Discussions Opened by:*

Elton R. Blaisdell, M. D., Portland, Me.,  
and Champ Lyons, M. D., Boston, Mass.

*Pathological Presentation by:*

Herbert E. Thompson, M. D., Bangor, Me.

3. A 7 months old male infant presenting an abdominal mass.

*Presented by:*

Blinn W. Russell, M. D., Lewiston, Me.

*Discussion Opened by:*

William V. Cox, M. D., Lewiston, Me.

*Pathological Presentation by:*

Romeo A. Beliveau, M. D., Lewiston, Me.

4. A 68-year-old male complaining of breathlessness for 8 months, vomiting and numbness and tingling of hands and feet for 4 weeks.

*Presented by:*

Richard Hawkes, M. D., Portland, Me.

*Discussion Opened by:*

John O. Piper, M. D., Waterville, Me., and  
William B. Dameshek, M. D., Boston, Mass.

*Pathological Presentation by:*

Mortimer Warren, M. D., Portland, Me.

5. Case of obscure temperature, loss of weight, hematuria, leukocytosis and fatigue.

*Presented by:*

E. M. Fuller, Jr., M. D., Bath, Me.

*Discussion Opened by:*

Eugene H. Drake, M. D., Portland, Me.

*Pathological Presentation by:*

Julius Gottlieb, M. D., Lewiston, Me.

Cases Presented in Synopsis Form by Charles W. Steele, M. D., Auburn, Maine; H. E. MacMahon, Boston, Mass.; and Julius Gottlieb, M. D., Lewiston, Me.

1. Dyspnea, orthopnea, cyanosis, hoarseness and coughing.
2. Dyspnea, orthopnea, epigastric pain—later sub-sternal, hematuria, nausea and vomiting.
3. Headache—constant and throbbing, stiffness of neck, nausea and vomiting.
4. Sudden onset of weakness of right leg and arm clearing up, orthopnea, dyspnea, somewhat irrational superseded by coma.

*Discussions Opened by:*

E. R. Blaisdell, M. D., Portland, Me.,

Eugene H. Drake, M. D., Portland, Me.,  
and John O. Piper, M. D., Waterville, Me.

NOTE: Mimeographed copies of all cases presented will be available at the conference. The data contained therein is the only information available to the various discussers.

**5.00 P. M.**

Election of President-Elect.

**5.30 P. M.**

Second Meeting of the House of Delegates.

**5.00-6.30 P. M.**

Moving Pictures showing the beauty of Franklin County in autumn and typical hunting and fishing scenes.

**6.30 P. M.**

President's Reception (informal).

**Evening Session**

**7.00-9.00 P. M.**

Dinner—Dancing.

**9.00 P. M.**

Modern Criminal Detection,  
V. W. Peterson, Special Agent in Charge,  
Federal Bureau of Investigation,  
Boston, Mass.

Ladies invited.

**9.45 P. M.**

Address by representative of National Physicians' Committee.

**TUESDAY, JUNE 25, 1940**

**Morning Session**

**9.30 A. M.-12.00 M.**

**Conferences**

**I**

**MEDICAL EXAMINERS**

Annual meeting of Maine Medico-Legal Society

and Medical Examiners' Conference, President Walter S. Stinchfield, M. D., Skowhegan, Me.

Annual Report.

Election of Officers.

Consideration of changed status under new law.

Round table discussion of two cases of unusual interest by medical examiners, pathologists, and county attorneys.

Timothy Leary, M. D., Boston, Mass., and Hon. Franz U. Burkett, Attorney General, Portland, Me., will be present as special guests, and will address the meeting.

## II

### NERVOUS AND MENTAL

FORREST C. TYSON, M. D.,  
Augusta, Me., *Chairman*

Psychotherapy in General Medical Practice,

M. Ralph Kaufman, M. D., Boston, Mass.

The Rorschach Test in Diagnosis of Psychoses  
and Psychoneuroses,

Andre A. Weil, M. D., Augusta State Hospital

Use of Intelligence Tests in Diagnosis of Psychotic Patients,

Grace R. Foster, Ph. D., Augusta State Hospital

Summary of Two Years' Experience with Insulin in Treatment of Certain Psychoses,

Edward Blank, M. D., Bangor State Hospital

## III

### MEDICAL

FRANCIS A. WINCHENBACH, M. D.,  
Bath, Me., *Chairman*

Head Injuries; The Responsibility of the General Practitioner.

1. Initial Treatment.

General Measures.

2. Differential Diagnosis.

3. Non-Surgical Groups.

Treatment.

4. Surgical Groups.

Treatment.

5. Prognosis.

This panel discussion will be provided by Merrill E. Joss, M. D., Richmond; George A. Gregory, M. D., Boothbay; Willis B. Mitchell, M. D., Wiscasset; William V. Cox, M. D., Lewiston; and H. Eugene Macdonald, M. D., Portland.

## IV

### SURGICAL

C. HAROLD JAMESON, M. D.,  
Rockland, Me., *Chairman*

Gratifying end-results from surgical therapy require discriminating pre-operative survey of the patient. Well chosen and properly administered anaesthesia, alert judgment and technique at operation and nice post-operative management. For the safety of the patient, observation of all these factors must have recognition. Various factors must also be observed by the surgeon for his own safety. To outline these several topics we are fortunate in obtaining the coöperation of the following:

1. Estimating the Surgical Risk,

Eugene E. O'Donnell, M. D., Portland, Me.

2. Pitfalls of Surgery,

Edward H. Risley, M. D., Waterville, Me.

3. Choice of Anaesthesia,

Gilbert Clapperton, M. D., Lewiston, Me.

4. Post-operative Management,

William V. Cox, M. D., Lewiston, Me.

5. Safeguarding the Surgeon,

Herbert E. Locke, Attorney, Augusta, Me.

Henry C. Marble, M. D., Boston, Mass. (guest speaker).

## V

### EAR, NOSE AND THROAT

FREDERICK T. HILL, M. D.,  
Waterville, Me., *Chairman*

Recent Advances in Oto-Laryngology:

1. The External Ear,

Pierre Provost, M. D., Augusta, Me.

2. The Middle Ear and Mastoid,

William A. Ellingwood, M. D., Rockland, Me.

3. Meniere's Disease,

Perley J. Mundie, M. D., Calais, Me.

4. Chemotherapy in Sepsis in Oto-Laryngology,

Edwin R. Irgens, M. D., Waterville, Me.

*Discussion (1-4) Opened by:*

Henry P. Johnson, M. D., Portland, Me.,

and Warren E. Kershner, M. D., Bath, Me.

5. Paranasal Sinuses,

Robert M. McQuoid, M. D., Bangor, Me.

6. Allergy in Oto-Laryngology,

Charles H. Gordon, M. D., Portland, Me.

*Discussion (5-6) Opened by:*

William H. Chaffers, M. D., Lewiston, Me.

7. The Pharynx and Larynx,

George O. Cummings, M. D., Portland, Me.

8. Neoplasms Involving Ear, Nose and Throat,

Allan C. Hurd, M. D., Gardiner, Me.

*Discussion (7-8) Opened by:*

Harry Butler, M. D., Bangor, Me.

## VI

### GYNECOLOGY

ADAM P. LEIGHTON, M. D.,  
Portland, Me., *Chairman*

1. Eclampsia and Its Treatment,

Walter F. W. Hay, M. D., Portland, Me.

2. Vaginal Discharges; their Significance and Treatment,

Theodore C. Bramhall, M. D., Portland, Me.

3. Post-Climacteric Bleeding,

Ralph L. Reynolds, M. D., Waterville, Me.

4. Meno and Metrorrhagia,

Magnus F. Ridlon, M. D., Bangor, Me.

## VII

### X-RAY

LANGDON T. THAXTER, M. D.,  
Portland, Me., *Chairman*

Round table discussion of matters of general roentgenological interest with presentation of cases.

Luncheon

12.30 P. M.

Past Presidents' and County Secretaries' Lunches.

Afternoon Session

2.00-5.00 P. M.

### SCIENTIFIC SYMPOSIUM

1. President's Address.

2. Compound Injuries to the Hand,

Henry C. Marble, M. D., Boston, Mass.

3. Obstetrical Problems,

Penry L. B. Ebbett, M. D., Houlton, Me.

4. Traumatic Intra-Cranial Hemorrhages with Demonstration of Brains,

Timothy Leary, M. D., Boston, Mass.



Evening Session  
7.00 P. M.

Annual dinner—(dress informal).  
Introduction of visiting delegates.  
Presentation of fifty-year medals by  
President George L. Pratt, M. D.  
P. S. Demers, Springvale, Me.  
Representing the Maine Pharmaceutical Association.  
Address: Governor Lewis O. Barrows.  
Banquet Guest Speaker,  
Morris Fishbein, M. D., Chicago, Ill., Editor of  
*The Journal of the American Medical Association*, "Quackery in Medicine."

GOLF TOURNAMENT

You are invited to play in the third annual golf tournament of the Maine Medical Association.

Event 1. Maine Medical Association championship. Prizes, for winner, a cup suitably engraved with name and possession of cup for one year. Names of subsequent winners to appear when cup changes hands. Suitable prize for runner-up.

Event 2. Kickers' handicap. Set your own handicap. Secret number between 72 and 80 selected. Player whose score minus handicap comes nearest to predetermined number will be declared the winner. Three prizes, 1st, 2nd, 3rd.

Event 3. Mixed foursome and ladies' tournament. Events are so arranged that a player may enter all the events by playing one complete round of 18 holes either on Monday or Tuesday, and having score card, properly attested, turned in to the Chairman of the Committee. Wives and daughters of members are eligible to compete in ladies' tournament or join in a mixed foursome.

TO THE LADIES

Trips by motorboat over Rangeley Lake, with its beautiful scenery, is a pleasure at your disposal. Unexcelled fishing for the fascinating land-locked salmon or trout is available and facilities can be provided on short notice. To those interested in automobile trips or scenic splendor and historic interest, The Arnold Trail and Cathedral Pines at Stratton await you. When in this locality, a two-mile trip to Eustis Ridge will reveal a magnificent panorama.

Tuesday afternoon there will be a bridge party with suitable prizes.

Through the courtesy of the Rangeley Garden Club, the gardens in and around Rangeley will be open for inspection during the convention.

FIFTY-YEAR SERVICE MEDALS

Gold medals will be presented, at the banquet Tuesday evening, to the below listed members in recognition of the service which they have rendered during fifty years spent in the practice of medicine.

Henry H. Brock, M. D., Portland (Cumberland County Society Member), Bowdoin, 1890.

Frederick B. Adams, M. D., Rockland (Knox County Society Member), New York University Medical College, 1890.

Edward E. Shapleigh, M. D., Kittery (York County Society Member), Bowdoin, 1890.

RECEPTION COMMITTEE

Frank A. Smith, M. D., Cumberland Mills.  
Stephen A. Cobb, M. D., Sanford.  
Henry C. Knowlton, M. D., Bangor.

These men will serve as a special reception committee to visiting delegates and guests.

MAINE MEDICO-LEGAL SOCIETY

The annual meeting of the Maine Medico-Legal Society and the Conference of Medical Examiners will be held at Rangeley, Tuesday, June 25th, at 9.30 A. M.

All Medical Examiners and County Attorneys are urged to be present.

Important matters in connection with the new law will be taken up.

Two interesting cases will be discussed by the Medical Examiners, Pathologists, and County Attorneys concerned.

Annual dues of one dollar may be sent in or paid at the meeting.

GEORGE L. PRATT, M. D., *Secretary*.

TRANSPORTATION

In response to many inquiries, we can assure you that the roads to Rangeley are now in excellent condition.

Convention Rates  
Rangeley Lake Hotel  
Rangeley Lakes, Maine

The following rates, which include all meals and banquets, will prevail during the convention:

Single room occupancy, private bath ..\$8.00 per day  
Single room occupancy, running water \$7.00 per day  
Double room, twin beds, private bath,  
two persons in room .....\$7.00 per day  
Double room, twin beds, running  
water, two persons in room .....\$6.00 per day  
Three and four persons in two double  
rooms with connecting bath .....\$7.00 per day  
Cottages situated near hotel and entrance to the  
grounds, same rates as main house.

The charge for non-registered guests for meals will be as follows:

Luncheon .....\$2.00  
Dinner .....\$2.00  
Banquet .....\$2.50

Garage fee 50c per night. Free outdoor parking.

Golf green fees will be complimented to all members, also use of the tennis courts.

For reservations write the Rangeley Lake Hotel, Rangeley Lakes, Maine.

Make your reservations early!!

MEMBERSHIP CARDS

Members must present membership cards before registering at the annual session.

## Official Delegates to the Eighty-Eighth Annual Session of the Maine Medical Association, 1940

### State Societies

#### Connecticut:

Stanley B. Weld, M. D., Hartford.  
Orville F. Rogers, M. D., New Haven.

#### Massachusetts:

Harold G. Giddings, M. D., Boston.  
Olin S. Pettingill, M. D., Middleton.

#### New Hampshire:

Daniel J. Sullivan, M. D., Nashua.  
Ralph W. Tuttle, M. D., Alton.

#### Rhode Island:

Clifton B. Leech, M. D., Providence.  
Charles L. Phillips, M. D., Greenwich.

#### Vermont:

C. G. Schurman, M. D., Newport.

### County Medical Societies

#### Androscoggin:

D. F. D. Russell, M. D., Leeds.  
L. A. Sweatt, M. D., Auburn.  
M. S. F. Greene, M. D., Lewiston.

#### Alternate:

R. N. Randall, M. D., Lewiston.

#### Aroostook:

A. B. Hagerthy, M. D., Ashland.  
H. E. Small, M. D., Fort Fairfield.

#### Cumberland:

Frank A. Smith, M. D., Cumberland Mills.  
Ralph Heifetz, M. D., Portland.  
E. H. Drake, M. D., Portland.  
T. C. Bramhall, M. D., Portland.  
F. M. Dooley, M. D., Portland.  
F. A. Ferguson, M. D., Portland.  
Edward A. Greco, M. D., Portland.

#### Alternates:

L. L. Hills, M. D., Westbrook.  
Thor Miller, M. D., Westbrook.  
Gordon N. Johnson, M. D., Portland.  
E. E. O'Donnell, M. D., Portland.  
H. E. Macdonald, M. D., Portland.  
W. R. Needelman, M. D., Portland.  
DeForest Weeks, M. D., Portland.

#### Franklin:

Harry Brinkman, M. D., Wilton.

#### Hancock:

M. A. Torrey, M. D., Ellsworth.

#### Alternate:

R. E. Weymouth, M. D., Bar Harbor.

#### Kennebec:

Howard F. Hill, M. D., Waterville.  
C. E. Towne, M. D., Waterville.  
Samuel Kagan, M. D., Augusta.  
Leon D. Herring, M. D., Winthrop.

#### Alternate:

N. Bisson, M. D., Waterville.

#### Knox:

G. W. Soule, M. D., Rockland.  
James Carswell, M. D., Camden.

#### Alternates:

Harry Tounge, Jr., M. D., Camden.  
C. B. Popplestone, M. D., Rockland.

#### Oxford:

E. M. McCarty, M. D., Rumford.  
H. M. Howard, M. D., Rumford.

#### Alternates:

R. E. Hubbard, M. D., Waterford.  
G. A. Green, M. D., Rumford.

#### Penobscot:

Forrest B. Ames, M. D., Bangor.  
H. C. Knowlton, M. D., Bangor.  
H. C. Scribner, M. D., Bangor.  
L. J. Wright, M. D., Bangor.

#### Alternates:

C. H. Burgess, M. D., Bangor.  
H. D. McKay, M. D., Old Town.  
L. H. Smith, M. D., Winterport.  
A. C. Strout, M. D., Dexter.

#### Piscataquis:

F. J. Pritham, M. D., Greenville Junction.

#### Alternate:

R. H. Marsh, M. D., Guilford.

#### Sagadahoc:

A. F. Williams, M. D., Augusta.

#### Somerset:

R. P. Laney, M. D., Skowhegan.  
H. L. Reed, M. D., Madison.

#### Waldo:

Foster C. Small, M. D., Belfast.

#### Washington:

John F. Hanson, M. D., Machias.

#### Alternate:

James Bates, M. D., Calais.

#### York:

C. W. Kinghorn, M. D., Kittery.  
Paul Hill, Jr., M. D., Saco.

#### Alternates:

J. H. Macdonald, M. D., Kennebunk.  
Carl E. Richards, M. D., Alfred.



**Maine Pharmaceutical Association**

P. S. Demers, Springvale.

**Delegate to the American Medical Association**

William A. Ellingwood, M. D., Rockland.

**Delegates to State Societies****Connecticut:**

Wedgwood P. Webber, M. D., Lewiston.

**Massachusetts:**

Thomas A. Foster, M. D., Portland.

**New Hampshire:**

William T. Rowe, M. D., Rumford.

**Rhode Island:**

M. A. Torrey, M. D., Ellsworth.

**Vermont (1939):**

Harold E. Small, M. D., Fort Fairfield.

**Delegate to Maine Pharmaceutical Association**

Adam P. Leighton, M. D., Portland.

**Commercial Exhibits at Eighty-Eighth Annual Session****The Coca-Cola Company, Atlanta, Georgia.**

"Coco-Cola will be served to the delegates with the compliments of The Coca-Cola Company."

**Elmer N. Blackwell, 207 Strand Building, Portland, Maine, Surgical Appliance Exhibit.**

Mr. Blackwell will again exhibit his line of surgical and corrective appliances. You will find only the most practical supports for men, women and children designed for service and comfort as well as correction. Nearly one-third of the patients, coming into your office require a support to alleviate the conditions which you commonly find, such as, Sacro-iliac, strain, hernia, foot, ankle, and leg weakness, ptosis, mammary glands or maternity. Be sure to get acquainted with the latest designs in supporting appliances while attending the medical meeting. Our mail order service is reliable, try it.

**The Denver Chemical Mfg. Co., 163 Varick Street, New York City.**

The Denver Chemical Mfg. Co. will exhibit Anti-phlogistine, employed by physicians in all parts of the world in the treatment of inflammatory and congestive conditions. They will also exhibit Galat-test, the new microreagent for the instantaneous detection of urine sugar. Be sure to see the Galat-test demonstration.

**H. G. Fischer & Company, Chicago, Illinois.**

H. G. Fischer & Co., 1940 models of X-ray and short wave apparatus are so distinctive, both in improved performance and in various instances greatly lowered in price, that every physician should consider inspection a convention obligation. The complete H. G. Fischer & Co. line includes shockproof X-ray apparatus, short wave units, combination cabinets, galvanic and wave generators, ultra violet and infra red lamps and many other units, accessories and supplies. Physicians attending the convention are invited to ask for demonstrations of apparatus in which they are interested and to consult with Fischer representative regarding technics made available by Fischer apparatus.

**C. B. Fleet Company, Inc., Lynchburg, Virginia.**

Phospho-Soda (Fleet), the buffered saline laxative, combines two U. S. P. salts of sodium phosphate in a stable concentrated solution of broader therapeutic range and is free from most of the disadvantages of saline laxatives.

May we remind you of—

Its ease of administration and milder after effects.

Its wide range of action, from gentle laxative to purge.

Its rapidity (action usually within the hour).

Its effectiveness in hepatic insufficiency.

Its amphoteric neutralizing quality.

Its stability, miscibility and economy.

Please note the new descriptive leaflet on your professional samples.

**George C. Frye Company, 116 Free Street, Portland, Maine.**

The Geo. C. Frye Company extends a cordial invitation to the members of the Maine Medical Association to visit their exhibit being held in conjunction with the annual State medical meeting. Mr. Sid Cheney and Mr. Claude Lamson will be present to greet their friends and to introduce new items of interest to the profession. Details of technique and application of various types of physical therapy apparatus will be demonstrated and explained.

**General Electric X-Ray Corporation, 2012 Jackson Boulevard, Chicago.**

The General Electric X-Ray Corporation will exhibit the new type bank of four lumiline illuminator, X-ray films, portable self-contained shockproof X-ray machine and Electro-cardiograph.

**Lederle Laboratories, 30 Rockefeller Plaza, New York City.**

Lederle Laboratories, Inc., will feature a display of their Hay Fever, Poison Ivy and Allergenic

products together with Globulin Modified Lederle Antitoxins and selected pharmaceutical products featuring Vi Delta Emulsion and Vitamin B. Complex in both the liquid and the capsule.

Samples and literature will be available.

#### **Eli Lilly and Company, Indianapolis, Indiana.**

Eli Lilly and Company produced the first commercial preparation of Insulin, contributed to development of liver therapy, and has been responsible for many other therapeutic advancements.

Information concerning all Lilly products will be available at the Lilly exhibit where "Merthiolate" (Sodium Ethyl Mercuri Thiosalicylate, Lilly), "Sodium Amytal" (Sodium Iso-amyl Ethyl Barbiturate, Lilly), and other important products will be featured.

#### **E. F. Mahady Co., Boston, Massachusetts.**

E. F. Mahady Co. invites you to interview their Representatives in attendance at the June Convention. The Portland Branch is in Maine to serve the medical profession. An explanation of the services and facilities being offered should be of interest to all medical men and Hospital Superintendents.

#### **Maine Surgical Supply Company, 10 Longfellow Square, Portland, Maine.**

This Company having now been organized approximately one year will have their first exhibit at this convention. Mr. John Lacy will be in charge of the exhibit at which time he hopes to have the opportunity of introducing himself to the various attending Physicians.

#### **Mead Johnson & Company, Evansville, Indiana.**

Mead Johnson & Co. will exhibit their complete line of infant diet materials and service items. Representatives will be on hand to discuss the application of these products with the physicians.

#### **The P. J. Noyes Company, Pharmaceutical Chemists, Lancaster, New Hampshire.**

We are grateful for the opportunity of contributing in a modest way towards the success of the meeting of the Maine Medical Association.

Joe E. Brown, Representative.

#### **Petrolagar Laboratories, Inc., 8134 McCormick Boulevard, Chicago.**

Mr. G. E. Schneider will have an interesting story to tell of the numerous uses of Petrolagar

for the treatment of constipation. Samples and literature pertaining to the Five Types of Petrolagar will be available at the booth, or if physicians prefer, will be mailed on request.

Doctors who are concerned with motion picture showings for staff meetings or classroom work will be especially interested to learn that several new films, approved by the American College of Surgeons, have been added to the Petrolagar library and are now available for bookings before recognized medical groups.

#### **Picker X-Ray Corporation, 300 Fourth Avenue, New York City.**

The Picker X-Ray Corporation takes pride in exhibiting the New Waite Shockproof Portable X-Ray Unit for home and office use, and several of the newer accessory devices which will be of interest to the Roentgenologist.

This Unit was designed and perfected to meet the ever growing demand of the Roentgenologist for an auxiliary X-ray unit with sufficient power, control and flexibility. This unit has kilovoltage range up to 79 KV at 15 MA and is obtainable with four or nine steps of voltage control and a choice of three types of tubestands.

For bulletins and demonstration call at the Picker X-Ray Corporation booth.

#### **Thomas W. Reed Company, 91 Massachusetts Avenue, Boston, Massachusetts.**

Our exhibit this year will have many interesting items for the doctors to see. We will have the Birtcher diathermy to display and many instruments all stainless steel for all types of surgery either in the office or the hospital.

Mr. John F. Walsh from Waterville, Maine, our local representative will be in charge of our exhibit and will be glad to answer any questions pertaining to instruments or equipment for the office or hospital.

#### **R. J. Strassenburgh Co., Rochester, New York.**

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\*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA, PA.

Treasurer's Report

Chester A. Jordan  
Harold C. Jordan

Members of American  
Institute of Accountants

JORDAN & JORDAN  
ACCOUNTANTS AND AUDITORS  
Fidelity Building  
Portland, Maine

May 31, 1940.

MAINE MEDICAL ASSOCIATION AND JOURNAL,  
PORTLAND, MAINE.

Gentlemen:

We respectfully report that we have completed the audit of your accounting records for the fiscal year ended May 31, 1940, and have found the same complete and correct in all details of record. Statements annexed hereto are, in our opinion, properly drawn up to show the true financial position of the Association May 31, 1940, and the income and expense for the year under review.

Respectfully submitted,

JORDAN & JORDAN,  
Accountants and Auditors.

MAINE MEDICAL ASSOCIATION AND JOURNAL

BALANCE SHEET, MAY 31, 1940

ASSETS

Cash in Banks .....	\$14,136.37
Accounts Receivable—Sundry .....	294.34
Dues Receivable .....	152.00
Advertising Receivable .....	358.54
Securities .....	7,405.00
Furnishings and Equipment .....	948.93
Impounded Cash .....	1,706.31
Deferred Expenses—Annual Meeting Expense .....	1.95
Total Assets .....	\$25,003.44

TRUST FUND INVESTMENTS

Prince A. Morrow Fund:—	
12 Shares American Agricultural Chemical Co. (Cost) .....	\$348.00
Savings Account No. 3905, Canal National Bank .....	492.42
Savings Account No. 54236, Fidelity Trust Co., Impounded .....	60.68
	\$ 901.10
Thayer Library Fund:—	
Savings Account No. 3903, Canal National Bank .....	\$904.54
Savings Account No. 54631, Fidelity Trust Co., Impounded .....	337.04
	1,241.58
Total Fund Investments .....	2,142.68
Total Assets and Fund Investments .....	\$27,146.12



LIABILITIES AND CAPITAL

Deferred Income:—	
Exhibit Space—1940 Exhibit .....	\$ 643.50
Capital Account—May 31, 1940 .....	24,359.94
Total Liabilities and Capital .....	<u>\$25,003.44</u>

TRUST FUNDS

Trust No. 1—Prince A. Morrow Fund .....	\$ 568.52	
Unexpended Income .....	332.58	
	<u>          </u>	\$ 901.10
Trust No. 2—Thayer Library Fund .....	\$1,229.72	
Unexpended Income .....	11.86	
	<u>          </u>	1,241.58
Total Trust Funds .....		<u>2,142.68</u>
Total Liabilities, Capital and Trust Funds .....		<u><u>\$27,146.12</u></u>

CAPITAL ACCOUNT, ONE YEAR ENDED MAY 31, 1940

Balance—June 1, 1939 .....	\$24,865.88
Deduct:—Prior Year Accounts Paid this Period .....	\$139.76
Expense in Excess of Income, One Year .....	366.18
	<u>505.94</u>
Balance—May 31, 1940 .....	<u><u>\$24,359.94</u></u>

STATEMENT OF REVENUE AND EXPENSE, ONE YEAR ENDED MAY 31, 1940

REVENUE

Dues .....	\$ 5,656.00
Income from Securities .....	326.50
Interest Received .....	191.56
Exhibit Space—1939 Convention .....	814.50
C. M. A. B. Advertising .....	2,397.12
Local Advertising .....	1,059.40
Subscriptions and Sales of JOURNALS .....	22.00
Total Revenue .....	<u>\$10,467.08</u>

EXPENSE

Salaries:—	
Dr. Jackson, Editor .....	\$1,000.00
Dr. Carter, Secretary and Treasurer .....	1,200.00
Mrs. Kennard, Assistant Secretary .....	1,500.20
Traveling Expenses:—	
President .....	300.00
Secretaries .....	143.10
Councilors .....	52.52
Office Expenses:—	
Office Assistants .....	122.00
Supplies, Stationery, etc. ....	301.03
Postage and Mailing Expense .....	171.61
Telephone .....	140.65
Auditing .....	56.42
Miscellaneous .....	91.98
Committee—Graduate Education .....	131.66
Clinical Session .....	152.75
Delegates—N. E. Medical Societies .....	137.83

A. M. A. Meeting .....	136.75
Medical Advisory Committee .....	500.00
Annual Meeting .....	785.90
Printing .....	3,686.64
Plates .....	182.22
Constitution and By-Laws .....	40.00
Total Expense .....	<u>10,833.26</u>
Expense in Excess of Revenue—One Year .....	<u><u>\$366.18</u></u>

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS, ONE YEAR ENDED, MAY 31, 1940

Cash in Banks June 1, 1939 .....	\$14,775.97
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RECEIPTS

Received from Dues .....	\$5,616.00
Income from Investments .....	518.06
Exhibit Space Rentals .....	662.00
Liquidating Dividend—Fidelity Trust Co. ....	47.83
Subscriptions and Sale of JOURNALS .....	22.00
Advertising .....	3,451.57
	<u>10,317.46</u>
	<u>\$25,093.43</u>

DISBURSEMENTS

Salaries .....	\$3,700.20
Traveling Expenses .....	495.62
Office Expenses .....	883.69
Committees, Clinical Session and A. M. A. Meeting .....	584.33
Annual Meeting—1939 and 1940 .....	744.60
Medical and Advisory Committee .....	500.00
Printing and Plates .....	3,868.86
Constitution and By-Laws .....	40.00
Prior Year Accounts Paid this Period .....	139.76
	<u>10,957.06</u>

Cash in Banks—May 31, 1940 .....	<u><u>\$14,136.37</u></u>
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Canal National Bank—Checking Account .....	\$3,452.98
Canal National Bank—Savings Account .....	1,848.70
Maine Savings Bank .....	4,435.59
Portland Savings Bank .....	4,399.10
	<u>\$14,136.37</u>

SECURITIES—BONDS, MAY 31, 1940

Description	Cost
\$2,000 Commonwealth of Australia, Ext. Loan 30 Yr. 5's, 1957 .....	\$1,960.00
700 Prudence Bond Corp. 1st Mtge. Coll. Series 6, 5½'s, 1936 (Defaulted) .....	700.00
3,000 Portland Terminal Co. 1st Mtge. 5's, 1961 .....	3,045.00
1,700 Mortbon Corp. of N. Y. Reg. Coll.	
\$400 June 1, 1941, A 5's	
400 1946, B 5's	
400 1951, C 5's .....	1,700.00
500 1956, D 5's	
10 Shares V. T. Class A, \$1—Par .....	
	<u><u>\$7,405.00</u></u>



## Book Review

### "Diseases of the Foot"

By Emil D. W. Hanser, M. S., M. D., Assistant Professor of Bone and Joint Surgery, Northwestern University Medical School; Attending Orthopedic Surgeon, Passavant Memorial Hospital, Chicago, with a Foreword by Sumner L. Koch, M. D. 472 pages with 263 illustrations on 172 figures, some in colors.

Published by W. B. Saunders Company, Philadelphia and London, 1939. Price, \$6.00.

Several excellent additions to the medical literature with special reference to the human foot and its ailments have come from the presses in recent years.

The introductory volume to this newly re-opened field of medical and surgical interest is Dr. Dudley J. Morton's thought-provoking, action-stimulating, scientific monograph entitled "The Human Foot" now in its second edition. Lately there also appeared Drs. Frank D. Dickson's and Rex L. Diveley's "Functional Disorders of the Foot." Both were reviewed in THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION. Another book on the subject is Dr. Norman Lake's "The Foot." Now we are presented with Dr. Emil D. W. Hanser's "Diseases of the Foot." Each of these works is well conceived, well constructed, and well presented, and, so far as is known, well received.

Dr. Hanser's book is specifically designed for the teaching of this specialty. It was created for the purpose of providing the medical student and the general practitioner with a comprehensive treatise which is expected to serve as a basis for instruction which will lead to an adequate understanding of the anatomy and physiology of the normally and the abnormally developed foot, the pathological changes produced in the foot by disease-producing organisms, faulty employment, injuries, new growths, etc., and above all, is expected to lead to an understanding of the end results aimed at in any and all forms of treatment which may be employable for the purposes of reconstructing a useless or painful human foot to a useful and enjoyable member of the human organism. The work here presented is the result of the expenditure of years of hard work in an effort to clarify the problems involved and to present the present-day solutions of these problems to the medical profession in this uniformly applicable guide to successful therapy in practically all forms of discomfort-producing aberrations from physiologically well harmonized normal functions of the human foot. Here is an excellent textbook written for a medico-surgical specialty which promises great and far-reaching possibilities for further development.

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# The Journal of the Maine Medical Association

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Volume Thirty-one

Portland, Maine, July, 1940

No. 7

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## *President's Address\**

By GEORGE L. PRATT, M. D., Farmington, Maine

*Mr. President-Elect, Members of the Association and Guests:*

As our time this afternoon is very well filled, I propose to confine my remarks to a few observations on State and National affairs in the medical field.

Our State and County organizations have been running rather smoothly during the year, the main weakness being the indifference of some members who seldom attend meetings, and who fail to show much interest in the work of their societies.

I believe that this condition is improving, but the secretaries and other officers should continue to aim at 100% participation of our members.

Next year may not be so quiet.

Our relations with the cults are almost sure to come up, in some way, during a legislative year.

They may try again to force their way into our hospitals.

We must be ready to oppose any such move in coöperation with the Hospital Association,

which did such excellent work during the last session of the Legislature.

It would help greatly if each member considered himself a committee of one to see that Legislators, to whom he has access, are thoroughly informed on this matter.

Another matter to which I would call your attention briefly, is that we have in Maine two standards of licensure for the practice of medicine.

The M. D.'s are held up to high qualifications, while at the same time another group of different qualifications is also licensed to practice medicine.

Our legal advisors tell us that this is perfectly legal, but it seems opposed to common sense.

In my opinion we will get along best with cults by having nothing whatever to do with them—professionally.

If we mix with them at all complications arise immediately.

An exception must be made in the case of Health officers and the State Laboratory.

\* Read at the 88th Annual Session of the Maine Medical Association, Rangeley Lakes, Maine, June 25, 1940.



State law requires that they have some dealings with them.

National medical affairs are far from being settled.

The Wagner National Health Act is not being pushed just now, but it is still before Congress, still in the Committee, and still in charge of its New Deal proponents.

When, and if, circumstances are more favorable, as they would be, in the event of success for the New Dealers in the National election, we may expect that a more or less modified bill will be brought out.

The new Wagner Bill, the hospital bill, is a comparatively minor affair, and will probably become a law.

If a good Advisory Council is appointed and given real authority, this bill may be of some value, but it should be regarded as only a first step in the National Health program.

Senator Taft has some sound ideas on medical legislation.

In an address to the Ohio State Medical Association, he said, in effect, that probably the Federal Government should do more in aiding certain states to care for their indigent sick, but that to do so it is wholly unnecessary to provide an army of Federal officials, to change the American way of practicing medicine and running hospitals, and to force Federal aid and control upon states that

need no aid, at enormous and indefinite cost.

The Supreme Court refused to make a decision in the suit against the American Medical Association, and sent the case back for trial.

So we face a prolonged period of litigation with the likelihood that eventually the case will come before the Supreme Court again.

An entirely new factor has entered into all of our problems.

The terrific shock of recent events in Europe has awakened the whole of America to its own danger.

We heartily support the President's proposals for an immediate and greatly expanded program of National defense and believe that it is urgently necessary, regardless of costs.

But would it not seem to be wise statesmanship, and also necessary, for the Government to refrain, at this time, from undertaking any new social change, such as the Wagner National Health Act, which would not only be enormously expensive, but for which there is little if any demand by the people?

One conclusion should be drawn from this brief survey of affairs and that is that we must keep our organization strong and alert and ready for action in order to preserve our American institutions.

---

It seems to me that an educational program having for its purpose the enlightenment of the public with regard to the hazards of nonprofessional treatment of dyspepsia after the age of 45 years, and particularly throughout the dyspeptic-cancer age period would produce some highly desirable results. To make people who suffer of persistent dyspepsia at these ages more conscious of the possibilities of cancer would undoubtedly result in the detection of many more cancers than now can be diagnosed; some of these lesions would certainly lend themselves to successful surgical treatment, and thus such a program would result in the saving of some lives.—

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ANDREW B. RIVERS, M. D., *Jour. A. M. A.*, September 23, 1939.

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The gastrointestinal types of lymphoma have particularly interested me. It seems almost proper to say: When is an ulcer not an ulcer? When it's a cancer or lymphoma. Anything a bit off-color in a picture apparently due to peptic ulcer may properly arouse suspicion of lymphoma, atypicality in the roentgenograms, failure to respond to adequate ulcer treatment, and so on. Multiple ulcerations are particularly suggestive of lymphoma.—J. H. MEANS, M. D., *Jour. A. M. A.*, August 19, 1939.

## *Diseases and Treatment of the Veins of the Lower Extremity\**

By ROBERT R. LINTON, M. D., Boston, Massachusetts

My subject for discussion this evening is diseases of the veins of the lower extremity.

The first condition which I shall consider will be that of varicose veins. This is the most common condition encountered in peripheral vascular disease. It is seen in both male and female, but is more common in the latter. There is still a certain amount of controversy over the etiology of varicose veins. There does seem to be a definite hereditary tendency, in that it is common to find that either or both parents of a patient with varicose veins also have them. Practically everyone agrees that the erect position that the human maintains, plays a very important role in the production of varicosities. I think it unlikely that one's occupations or habits have very much to do with the formation of varicose veins in a given individual. In the normal individual, the veins of the lower extremity, both superficial and deep, have valves in them which allow the blood to pass towards the heart. These valves segment the column of blood in the vein. This means that when the valves are competent the pressure exerted by the column of blood is much less than when the veins are incompetent so that the column of blood is not divided into segments.

**Etiology.** It is my opinion that the valves of the superficial venous system of the lower leg become incompetent for one reason, namely, dilatation of the vein wall with separation of the valve cusps, due to pressure from within the vein caused by the weight of the column of blood, between the level of the heart and the leg. I believe that varicosities start at or near the junction between the deep or superficial system. In the case of the long saphenous vein, which joins the femoral in the groin, we find that it passes through the fossa ovalis, formed by the fascia lata. There is a valve in the saphenous vein at this point. In some patients the fossa ovalis is much wider than in others. This re-

sults in less support to the saphenous vein, so that it can much more readily dilate due to pressure from within exerted by the column of blood from above. Once this valve has become incompetent, each succeeding set of valves distal to this point also become incompetent, since there is no support from without as the vein lies just beneath the skin and the superficial tissues.

This conception of the production of varicose veins explains the importance of severing the communication between the deep and superficial venous systems in the treatment of varicosities.

**Anatomy.** There are three venous systems in the lower leg that we are interested in, in the treatment of varicose veins.

1. The long saphenous vein.
2. The short saphenous vein.
3. The communicating veins which connect the superficial and deep venous systems.

The long saphenous vein begins over the dorsum of the foot, extends up the medial side of the leg and thigh, to join the femoral vein just below the inguinal ligament. A very important point from a surgical point of view is the fact that the saphenous vein in most individuals, joins the femoral at the level of the crease in the groin. For this reason, it is important that one's incision for the ligation of the long saphenous vein be placed very close to the crease. In stout individuals the crease may be even lower than the junction of these two veins so that the incision may need to be carried across onto the abdominal side.

A very important point in the anatomy of the long saphenous vein is the branches in the upper part of the thigh. Careful examination of anatomical dissections will show that there are three very constant branches arising from the long saphenous vein just distal to its junction with the femoral vein.

\* Read before the Kennebec County Medical Association, Gardiner General Hospital, Gardiner, Maine, November 16, 1939.



It is very important that these veins be recognized at the operation and that the ligation of the saphenous trunks should be proximal to them. A number of recurrences in our earlier cases were definitely due to failure to ligate above these veins. You will note that in pictures in the anatomy books, these veins connect with the main saphenous trunk lower down through various collateral channels. It is because of this fact one gets recurrences, if these veins are not ligated at the same time the long saphenous is ligated or if the ligation is done distal to these branches.

The short saphenous vein begins on the lateral side of the foot, passes upward along the posterolateral surface of the lower leg along with the sural nerve. It joins the popliteal vein about an inch above the crease in the popliteal space. It is much less common to find this vein involved in varicosities, than it is to find the long saphenous. Incompetence of it should always be examined for, as some of the so-called recurrences following treatment have been found to be due to varicosities of this system, which had been overlooked at the time of the first examination of the patient. Passing upward to join the long saphenous vein, one finds a constant branch arising from the upper centimeter of the short saphenous vein. This is of practical importance because one should make certain that the ligation is done proximal to the point from which this tributary arises, otherwise a recurrence may develop through this branch by way of the long saphenous vein.

The communicating system of veins is chiefly of interest in the treatment of varicose ulcers, which develop following a deep phlebitis. The greatest number of them occur in the lower leg. There are three or four in the thigh connecting the main trunk of the saphenous vein with the femoral vein. Occasionally these are found to be incompetent and if they are not ligated and divided, recurrence is apt to take place. I shall discuss the communicating veins of the lower leg in the treatment of postphlebotic varicose ulcers later on in the discussion.

Examination of the patient. In order to be able to treat a case of varicose veins properly, it is important to know which one of these sets of veins are at fault. The most valuable

test to ascertain this is the so-called Trendelenburg test. It is done as follows: The patient is placed on the examining table. The leg to be examined is elevated to a 45 degree angle with the horizontal in order to empty the superficial veins of blood. When this is accomplished, pressure is exerted over the saphenous vein high in the thigh by means of the hand. A rubber tourniquet may be used, but I have found that I can carry out the test more satisfactorily with my fingers. Maintaining pressure over the saphenous vein the patient is made to stand up. The varicose veins are then carefully watched for fifteen to twenty seconds. If they do not fill with blood in that time, the hand is released to see if they fill rapidly with blood from above. If such is the case, it is considered that the varicosities are of the long saphenous system only and the valves of this vein are incompetent, and the treatment that is indicated is a high ligation at the sapheno-femoral junction, followed later by injections of the varicose veins. If, on the other hand, the veins fill rapidly from below, that is within fifteen or twenty seconds after the patient stands up, it indicates that the varicosities are filling, either from the short saphenous vein or the communicating vein. In order to rule out the short saphenous vein the test is repeated, placing one hand over the short saphenous, and one over the long saphenous. If the veins still fill rapidly from below, one may feel very sure that the filling is due to incompetence of the communicating veins of the lower leg. It is not always necessary to operate on these communicating veins, but it is important to ascertain whether they are competent or not, because the prognosis after treatment will vary a good deal depending upon the condition of these veins. In most instances, I have not felt it necessary to operate upon them unless there are varicose ulcers present. If I do not operate upon them, I make sure that the patient understands that the treatment by ligation plus injections of the long saphenous vein will not be a permanent cure. If the varicosities are simply due to incompetence of the long saphenous vein, or the short saphenous vein, then I feel that it is legitimate to explain to the patient that ligation and injection of either or both of

these systems will assure the patient of a cure, certainly as nearly as it is possible without excising all the veins.

Another test which is valuable in the treatment of this condition is the so-called Schwartz test. This test was of more value when we were doing injections alone. It still helps one, however, in injections carried out after ligation. It consists of placing the fingers of one hand over the course of the saphenous vein in the thigh and tapping a large varicosity in the lower leg. By this means, an impulse synchronous with the tapping will be felt by the fingers of the upper hand. In this way it is possible to localize the saphenous vein where it cannot be palpated, so that an injection may be given.

Many men are greatly concerned about the deep circulation in the treatment of varicosities of the superficial system. I believe it is a very rare case indeed in which the superficial varicosities are acting as important collateral venous channels by which the blood is returning to the heart. If one is in doubt about the deep circulation, it can be tested by the so-called Perthe's test. This consists in applying a tight bandage to the leg, with the patient lying down and then allowing him to get up and walk about. If the leg becomes painful or the veins swell up markedly, while he is up walking, this indicates that the deep circulation is occluded. In my experience this is a very rare condition, as I have never happened to encounter it.

Another simple test which I have used to determine the condition of the deep system of veins is done as follows: With the patient standing up, a tourniquet is placed around the leg well up on the thigh. This tourniquet should be only tight enough to obstruct the superficial veins. The patient is then placed on the examining table in a supine position. His leg is elevated to about a 20 or 30 degree angle. If the superficial veins are found empty with this venous tourniquet in place, it is perfectly obvious that the deep circulation must be patent and adequate to take care of the return circulation from the leg.

**Treatment.** The history of the treatment of the varicose veins is a very interesting chapter in surgery. Many operations and forms of treatment have been devised.

Twelve years ago, we thought we were starting a new form of treatment at The Massachusetts General Hospital. However, perusal of the records of this hospital, between the years of 1835 and 1845, revealed that we were repeating a form of treatment which had been in vogue at that time. There were quite a large number of patients admitted to the hospital during that decade for the injection treatment of varicose veins. For some reason or other, that we have been unable to ascertain, the results of this form of treatment at that time were never recorded. It would be my impression that the reason for this was the failure of it as an adequate form of treatment. Perhaps if we had known about their results, we would not have had to repeat their experiences. The sclerosing material they used was a solution of iron chloride which is much stronger than the one we have used, but apparently according to the records no serious consequences resulted. The modern injection treatment of varicose veins was begun again about twelve to fifteen years ago. We carried it out in The Peripheral Vascular Clinic at The Massachusetts General Hospital for a period of three or four years. At the end of this time, a follow-up of our cases showed the recurrences were sixty-three percent. Because of this fact, we resorted to a ligation of the saphenous vein at the sapheno-femoral junction followed by an injection of a sclerosing solution into the saphenous trunk and its tributaries. This form of treatment in properly selected cases has proved very efficacious. Instead of sixty-three percent recurrences we have found that there have been seventy percent satisfactory results. The recurrences we have found were due to: First, improper high ligation, that is below the branches in the upper portion of the saphenous vein. Second, an incompetent short saphenous vein was overlooked, and third, there were recurrences due to incompetent communicating veins, both in the thigh and lower leg.

It was our custom originally to do retrograde injection of the saphenous vein at the time of the operation. At present, we have given up this step. I have three definite reasons for doing this. First, is the danger of the patient developing a thrombosis of the



deep veins, as occurred in one patient that I treated, who refused to get out of bed and walk about following the operation. We have felt that it is very important for the patient to remain ambulatory following the operation, especially if a retrograde injection has been done. The patient that I have in mind did not remain ambulatory and shortly after leaving the hospital had a very large pulmonary embolism, which fortunately was not fatal. I feel very definitely that if this patient had not had a retrograde injection, she would not have had a pulmonary embolus, because the formation of the thrombosis in the deep venous system, which was the origin of the pulmonary embolus, was directly attributable to the sclerosing solution getting into the deep circulation in sufficient concentration to produce a thrombosis. If a patient is made to walk, the solution is carried away more quickly because of the increased circulation of the blood in the extremity. None of our ambulatory patients have had any pulmonary emboli.

Second, if a sclerosing solution is injected, there is great temptation to inject too large an amount of it, especially in a large saphenous trunk. This may result in damage to the communicating veins and their valves, and if the latter are damaged, there is a very definite chance that there will be a recurrence of the varicose veins, as these communicating veins recanalize.

The third reason for not doing the retrograde injection is that there is always the danger that one may use the sclerosing solution by mistake, instead of novocaine, if additional anesthesia is necessary during the course of the operation, since it is usually already in a syringe. This does not seem likely, but it is, however, a very definite possibility.

Our present form of treatment in a simple, uncomplicated case of varicose veins is as follows: The patient is admitted to the hospital the night before operation. A very careful preparation of the groin is done. The following morning, he is given one and one-half grains of nembutol an hour prior to operation. Occasionally a hypodermic of morphine may be of value in a very nervous patient. The operation is done entirely under local anesthesia, infiltrating the skin and su-

perficial tissues with a one percent solution of novocaine. The most effective incision is an oblique incision parallel to the cleavage planes of the skin. This is best placed about one-quarter of an inch below the crease in the groin, unless the patient is a very obese one, in which case it may be advisable to even cross the crease of the groin with a more vertical type of incision. As soon as the incision through the skin is completed, towels are clipped to the edges of the wound by Michel skin clips. In this way there is a minimum danger of contamination of the wound. The upper branches of the saphenous vein are next isolated. It is practical to ligate and divide these as in this way it is much easier to visualize the actual sapheno-femoral junction. The dissection beneath the superficial fascia is best made in a vertical direction, because in this way, there is very little danger of damage to the lymphatic vessels of the leg. I have seen one case which had a complete lymphatic fistula following a simple high ligation of the saphenous vein. It fortunately was only temporary, but was due to using a transverse incision and in this way undoubtedly severing all of the lymphatic trunks. It is important to visualize the femoral vein over a distance of about an inch. Sometimes the upper branches of the saphenous vein are found to arise exactly at the junction of the saphenous and femoral vein. In this case it is important to not only ligate the saphenous vein, but also these branches. Very fine catgut or silk is suitable for the operation. After severing the saphenous vein, the proximal end is doubly ligated. One of the ligatures should be a stitch ligature, as this will guaranty against hemorrhage due to the slipping of it. I usually excise about two or three inches of the saphenous trunk distally, as occasionally one finds a communicating vein just about an inch from the sapheno-femoral junction. The wound is closed in layers without drainage and a very small dressing applied. Following the operation the patient is requested to walk about two minutes, at least, out of every hour until bedtime. This maintains an active circulation in the deep system, and it also keeps the patient in a physical condition so that he may be discharged from the hospital on the day following the operation.

The skin stitches are removed about the fifth postoperative day and the injections of the varicosities may be begun at that time. I have found there is an advantage in delaying injections until this time, because I have noted that the varicosities shrink in size, once the pressure from above has been removed by the saphenous ligation. Sodium morrhuate is the sclerosing solution that we use at the present time. There are other ones available, but this one seems to be very satisfactory. There is no danger from sloughing as was encountered with the quinine urethane solution. Injections of the remaining veins are carried out at weekly intervals and most of the patients can be cleared up in about four or five visits. It is not necessary to wear supporting bandages such as ace bandages, while this treatment is being continued. If the short saphenous vein needs ligation, it is very important that the incision for this vein be made through a horizontal or curved incision, just above the crease in the popliteal space. A vertical incision across this crease heals very poorly. A transverse incision should be adequate in length and usually extends from one side of the leg to the other. Despite this it heals much more readily and cosmetically than a shorter vertical incision. The postoperative treatment for this vein is the same as for the long saphenous vein.

**Varicose Ulcers.** There are two types of varicose ulcers, the simple and the postphlebotic type. Simple varicose ulcers are associated with varicosities of the long or short saphenous system. When the ulcer is located on the medial side of the leg or over the tibia, it is usually the long saphenous vein which is at fault. An ulcer over the lateral malleolus or on the postero-lateral side of the lower leg practically always indicates incompetence of the short saphenous vein. This type of varicose ulcer is very readily cured by ligation of the saphenous vein and followed by injections.

**The Postphlebotic Varicose Ulcer.** This type of ulceration is much more resistant to treatment. The ulcers present a very typical appearance. They are most commonly located on the inner side of the leg just above the medial malleolus. However, they may be found at any point on the lower leg and occa-

sionally one will find an ulcer which completely encircles the leg. In most cases one is able to elicit a previous history of a deep phlebitis. This may be secondary to pregnancy and operation or an acute infection, such as typhoid fever, scarlet fever, or pneumonia. The ulcer usually does not appear for several years after the attack of deep phlebitis. Occasionally it will occur as early as a year, or as late as twenty years afterwards. In most cases the ulceration will have been present for a number of years before the patient submits himself to a surgeon for treatment. They have usually tried everything else in an attempt to cure it, but in most cases these various forms of treatment result in only temporary healing.

The complete pathological anatomy of postphlebotic varicose ulcers is not understood as yet. Many persons have assumed that it is due to stagnation of the venous blood with resulting anoxemia to the tissues. That this is not true has been shown by several investigators. In fact the blood coming from the ulcer area usually carries more oxygen than blood taken from the superficial veins of the opposite leg, which is normal. Another theory is that there is so much scar tissue in the ulcer area that it interferes with the nutrition of the skin overlying it. There is considerable doubt in my opinion, that this is the case because it has been possible to skin graft the ulcer areas and have the graft remain viable for a good many years, without removing any of the scar tissue. I feel that the more tenable theory is that ulcers are due to incompetence of the valves of the superficial, the deep and the communicating veins. In addition to this pathology in the veins, I think there can be little question but that there is some abnormality of the lymphatic drainage to the lower leg, especially of the subcutaneous tissues. Most persons with postphlebotic varicose ulcers have peripheral edema, much more so than in patients with only simple varicosities or simple varicose ulcers. In addition to this pathological anatomy, I feel that infection plays a very important role in the formation of the ulcer, and also in its resistance to treatment. Because of the very marked benefit derived from the use of a fungicide on the skin surrounding the ulcer area and also the use of boric



compresses in clearing up the ulcer area, there seems to be little question but that fungus infection plays a very important role.

The treatment of postphlebotic varicose ulcers may be divided into temporary measures, which include the use of pastes, ointments and bandages, such as elastoplast and gelocast. These are very similar to the Unna's paste boot, which has been used for many years. They certainly are a very important aid in the handling of these cases, but usually they cannot be considered as curatives in themselves.

The other type of treatment is the surgical treatment. One of the more common operations which has been devised was that of Homans to whom we are indebted in a great measure for the understanding of this type of ulceration of the extremity. His operation consisted in excising the ulcer area with some of the surrounding skin. After removing this block of tissue a large Thiersch graft is cut and placed directly on the muscle or periosteum of the tibia, if it was necessary to uncover this tissue in the resection. There have been many satisfactory cures by this type of operation. The main disadvantage to it, is that it does not give a very good cosmetic result and sometimes it does not cure the ulcer.

For the past three or four years in the peripheral vascular clinic of The Massachusetts General Hospital, a new type of operation has been devised for the cure of this type of ulceration. The operation is based on the anatomical study of the communicating veins of the lower leg, which have been described by Linton<sup>2</sup>. As originally described the operation consisted of ligating the communicating veins in the lower leg. If the ulceration was on the medial side, the medial group of communicating veins were ligated. If it were on the lateral side the posterolateral communicating veins were ligated, or if it were on the anterior surface, the anterolateral group were ligated. Since then an additional step has been added to the operation because of the persistent edema which is found in most of these cases following the ligation. This edema is not produced by the operation, but as I have already stated, it is usually concomitant with the ulcer. This step consists of excising the deep fascia on both

sides of the incision and the removal of some of the scar tissue and also a large number of the superficial veins, which are encountered. On the medial side it is usually possible to resect the saphenous vein from the upper end of the incision just below the knee to just above the malleolus at the lower end of the incision. Instead of the three incisions which were originally described, it is possible to do a very complete ligation of all the communicating veins through two incisions. The medial one and a lateral one just posterior to the fibula. The results from this procedure have been very satisfactory in most cases. There have been a number of recurrences after one or two years. In practically all of these cases it has been possible to show that the recurrence has been due to an incomplete operation. Before carrying out the ligation of the communicating veins, it is very imperative that a high ligation of the long saphenous and the short saphenous, if it is involved, should be done.

A case of postphlebotic varicose ulcer which visits the clinic for the first time is treated as follows: The patient is admitted to the hospital and placed in bed with the foot of the bed elevated so that the veins are kept collapsed at all times. Hot boric compresses are applied every two hours until the ulcer is very clean and the granulations in the base of it present a nice, red, healthy appearance. This requires usually from a week to ten days. A Thiersch is then done, the patient is kept in bed for another week or ten days. Then is gradually mobilized, starting with Buerger exercises for a few days, and then allowed to walk. A supporting bandage of the Bender type is applied very snugly to the leg. After the patient is ambulatory, a high ligation of the long or short or both saphenous veins is done, depending on whether they are both involved. A gelocast bandage or an elastoplast bandage is then applied from the toes to the knee and the patient is allowed to go home a few days after the ligation. The bandage is changed every two weeks. A fungicide is applied to the skin, before applying the new bandage. At the end of six weeks the patient is re-admitted to the hospital, and the ligation of the communicating veins is done. The reason for this period of six weeks interim is to give the tissues of the lower leg a chance

to completely heal and for the body to rid the tissues of all the contaminating organisms, which may be present. One case, which was done ten days after a Thiersch graft became septic. Since that case, they have all healed without infection, and I think it is because this period of six weeks has been rigidly adhered to between the time of grafting and the time of operation.

The incisions used are straight, longitudinal cuts. No attempt is made to circumvent an ulcer area. If it lies in the line of incision the cut is carried directly through it. In practically all the cases that have been done, very large communications have been found between the deep and superficial systems. It is too early yet to be sure that all cases can be cured by this method. There have been many gratifying results, some of which have lasted over three years.

**Phlebitis.** For practical purposes, phlebitis may be divided into the superficial and the deep type.

**Superficial Phlebitis.** Phlebitis is one of the common complications associated with varicose veins. In most cases it is a thrombosis, rather than an actual infection in the vein. Many attempts have been made to culture the organisms in the area of phlebitis but these have usually been negative. The most accepted way of treating acute phlebitis of the superficial veins is to place the patient in bed and apply either heat or cold. In most cases this requires at least three or four weeks of bed treatment, and sometimes at the end of this period, the phlebitis is still present.

For the past three or four years in our Peripheral Vascular Clinic, we have treated phlebitis of the superficial veins by an immediate high ligation of the vein affected. Even if the thrombosis can be felt up to the fossa ovalis, we feel that a ligation of the affected vein is indicated. The operation is done under novocaine anesthesia using a local infiltration of a one percent solution. All the cases have healed, per primum. In a number of them the thrombosis has been found to extend right up to the femoral vein. It has always been possible, however, to get a ligature between the thrombus and the femoral vein. Following the operation the

patient may become ambulatory within a day or two, providing there is no other condition which would contraindicate it. There is usually a very phenomenal subsidence of the acute phlebitis. Instead of dragging on for three or four weeks, or longer, it is usually practically gone in a week to ten days. The pain disappears in as short a time as forty-eight hours. In addition to curing the phlebitis, the operation cures the varicose veins in many cases. I believe also that a certain number of cases of deep phlebitis will be prevented by this operation, as we have seen cases of deep phlebitis develop following an attack of acute superficial phlebitis. We have operated on some of these and have found a direct extension of the thrombus from the saphenous vein into the femoral vein.

**Deep Phlebitis.** The treatment of this is very definitely in a state of flux at present. There is a great deal in the literature in reference to the use of novocaine injection of the lumbar ganglia. It seems a little questionable whether this method of treatment does all that it is supposed to. In our clinic we rather favor the use of heat in the form of warm moist poultices from the toes to the groin. This probably has the same effect as a novocaine block of the lumbar ganglia and in addition it is carried over a much longer period, as the novocaine effect wears off very shortly usually in two or three hours. Practically everyone agrees that these patients must be kept in bed, as the phlebitis is worse when they are up and about. A certain number of them develop pulmonary infarcts and emboli.

During the past year we have ligated the femoral vein on a number of these patients with very excellent results. Whether every patient with a deep phlebitis should have a ligation of the femoral vein is very questionable, but certainly in selected cases, it is an operation which has proved very useful. At first thought, one would think the ligation of the femoral vein would be a very serious matter, in reference to the circulation of the leg. Actually, however, the circulation does not suffer greatly. There is a temporary venous stasis, very rapidly the collateral channels dilate and the leg appears normal



## *A Case of Sub-Acute Bacterial Endocarditis Treated with Heparin and Sulfapyridine*

By DEFOREST WEEKS, M. D., Portland, Maine

E. C. Female, Age 33.

P. H. Rheumatic fever in 1926, 3 months' duration, leaving her with a loud systolic murmur. In last few years she has taken digitalis at times for dyspnea. Appendectomy in 1936.

Present Illness. In August, 1939, had an attack of diarrhea. Early in September she returned to Portland from camp and began having chills and a high fever up to 104°. She persisted with a fever 102+ for some time. After about 10 days she had an eruption on abdomen similar to "rose spots." Repeated Widal's and blood cultures were negative except for weak reaction to paratyphoid. At this time her W. B. C. was 7,000, with normal cells. Her spleen was a little enlarged and tender. Her urine showed

abundant pus cells but otherwise normal. There was no jaundice or petechiae.

In October she developed some mildly inflamed joints. Her heart action was regular with a loud systolic murmur over praecordia, loudest at apex and transmitted to axilla. During this period she received some salicylates and was in bed. Her fever was variable with some remissions.

During November she ran a temperature around 100-101 until November 30, 1939, when she was removed to Eye and Ear Infirmary where treatment was begun with intravenous sodium salicylate and intramuscular injections of low potency liver extract on alternate days. On admission her white count was 14,000.

The hospital report follows:

Nov. 30, 1939,	Entered Eye and Ear.	Temp. 100 <sup>4</sup> , Pulse 120, Resp. 20. B/P 114/82.
Dec. 1,	Temp. 101 <sup>2</sup> , Pulse 108, Resp. 20. B/P 120/80. Urine negative. Digitalis.	
2,	Temp. 101 <sup>4</sup> , Pulse 96. B/P 114/58. Neck and right arm lame. Nauseated.	
3,	Temp. 101 <sup>4</sup> , Pulse 92. B/P 110/60. Normal. Blood report: Hb. 71%, RBC 4,750,000, WBC 11,500, Neut. 71, Lymph. 29.	
4,	Temp. 99, Pulse 88. B/P 118/80.	
5,	Temp. 101 <sup>6</sup> , Pulse 124. Blood transfusion at 12 of 400 cc.	
6,	Temp. 102 <sup>4</sup> , Pulse 120. Pain in left shoulder. Elix. Feosol. Sodium salicylate gr. XV intravenously.	
7,	Temp. 101 <sup>4</sup> , Pulse 120. Pain in left shoulder. Elix. Feosol. Sodium salicylate gr. XV intravenously.	
8,	Temp. 99 <sup>2</sup> , Pulse 88. Some soreness in shoulder. Elix. Feosol. Sodium salicylate gr. XV intravenously.	
9,	Temp. 100 <sup>4</sup> , Pulse 100. Some soreness in shoulder. Elix. Feosol. Liver extract 1 cc. in muscle.	
10,	Temp. 100 <sup>4</sup> , Pulse 90. Some soreness in shoulder.	
11,	Temp. 101 <sup>4</sup> , Pulse 130. Feosol and Sodium salicylate intravenously.	
12,	Temp. 101 <sup>4</sup> , Pulse 100. Feosol and Liver extract.	
13,	Temp. 101 <sup>4</sup> , Pulse 124. Feosol and Sodium salicylate.	
14,	Temp. 101, Pulse 130. Sulfapyridine began. Vomiting. Sodium salicylate. Liver extract. Blood culture of Dec. 1, 2, 3 shows streptococcus viridans.	
15,	Temp. 100(R), Pulse 100. Sulfapyridine gms. 3.500 cc. 10% glucose in saline, intravenously.	
16,	Temp. 99 <sup>4</sup> , Pulse 124. Has discomfort in joints. Some headache. Sulfapyridine gm. 3. Liver extract. Coramine ½ amp. at 3.55 P. M.	
17,	Temp. 99 <sup>4</sup> , Pulse 88. Sulfapyridine gm. 4. Feosol.	
18,	Temp. 98 <sup>6</sup> , Pulse 88. Sulfapyridine gm. 3. Feosol. Liver extract 1 cc.	
19,	Temp. 98 <sup>4</sup> , Pulse 100. Sulfapyridine gm. 6. Vomited. Numbness in right hand. Neck sore.	
20,	Temp. 99, Pulse 100. Sulfapyridine gm. 6. Liver extract 1 cc.	
21,	Temp. 99, Pulse 92. Sulfapyridine gm. 6. Feosol. Comfortable.	
22,	Temp. 98 <sup>8</sup> , Pulse 84. Sulfapyridine gm. 6. Liver extract 1 cc.	
23,	Temp. 98 <sup>4</sup> , Pulse 94. Sulfapyridine gm. 6. Feosol. Comfortable.	
24,	Temp. 98 <sup>6</sup> , Pulse 88. Sulfapyridine gm. 4. Nausea, vomiting.	
25,	Temp. 99, Pulse 100. Sulfapyridine concentration 2.6 milligrams per 100 cc. Weak and faint. Coramine ½ ampoule.	

26,	Temp. 98 <sup>6</sup> , Pulse 92.	Continuous intravenous drip of one 10 cc. ampoule of Heparin to 500 cc. normal saline at rate of 20 drops per minute. This was continued with sulfapyridine daily. The concentration did not go above 2.6 mgm. per cent. 3 ampoules of Heparin daily. Her coag. time on Dec. 27 was 12½ minutes. Dec. 31, coag. time 45 minutes. Coag. time was 30 minutes in A. M., 40 minutes in P. M., Jan. 2, 1940. She had an occasional hypodermic of morphine sulf. gr. ⅙ to relieve restlessness and discomfort.
27,	Temp. 100 <sup>2</sup> , Pulse 106.	
28,	Temp. 98 <sup>6</sup> , Pulse 94.	Cevitamic acid, 100 mgm., daily.
29,	Temp. 98 <sup>6</sup> , Pulse 100.	Menses began with moderate flow. Coramine ½ amp. Liver extract.
30,	Temp. 99 <sup>4</sup> , Pulse 102.	Some nausea and vomiting. Morphine gr. ⅙. Syntropan for menstrual pain.
31,	Temp. 99 <sup>2</sup> , Pulse 100.	Comfortable.
Jan. 1, 1940,	Temp. 98 <sup>6</sup> , Pulse 90.	Codein for headache.
2,	Temp. 100 <sup>2</sup> , Pulse 112.	Morphine gr. ⅙. Needle changed from left arm to right.
3,	Temp. 98 <sup>4</sup> , Pulse 88.	Comfortable except for nausea.
4,	Temp. 98 <sup>6</sup> , Pulse 90.	Comfortable except for nausea.
5,	Temp. 98 <sup>9</sup> , Pulse 90.	Comfortable except for pain in right arm.
6,	Temp. 98 <sup>8</sup> , Pulse 94.	Comfortable. Nauseated and vomited. Discontinued Heparin. Liver extract discontinued.
8,	Temp. 98 <sup>8</sup> , Pulse 100.	
9,	Temp. 98 <sup>6</sup> , Pulse 96.	Some joint pains.
10,	Temp. 98, Pulse 90.	HBG 75%.
11,	Temp. 98 <sup>6</sup> , Pulse 86.	Complained of intense itching of skin.
12,	Temp. 98 <sup>6</sup> , Pulse 88.	Comfortable.
13,	Temp. 98 <sup>8</sup> , Pulse 102.	Comfortable.
14,	Temp. 99, Pulse 94.	Nausea and vomiting. Feels weak and faint. Sulfapyridine stopped.
15,	Temp. 98 <sup>6</sup> , Pulse 80.	Comfortable. Sulfanilamide gr. LX.
16,	Temp. 99, Pulse 102.	Comfortable. Sulfanilamide gr. 20.
17,	Temp. 98, Pulse 100.	Comfortable. Sulfanilamide gr. 20.
18,	Temp. 98 <sup>4</sup> , Pulse 86.	Comfortable. Sulfanilamide discontinued.
19,	Temp. 98 <sup>6</sup> , Pulse 120.	Comfortable. Sore throat. Blood culture negative.
20,	Temp. 99, Pulse 108.	Comfortable. Has a little cold.
21,	Temp. 99, Pulse 98.	Comfortable. Has a little cold.
22,	Temp. 99, Pulse 80.	Comfortable.
23,	Temp. 99 <sup>2</sup> , Pulse 84.	Comfortable. Up on headrest.
24,	Temp. 99, Pulse 86.	Comfortable.
25,	Temp. 98 <sup>6</sup> , Pulse 94.	Some pain in neck.
26,	Temp. 98 <sup>6</sup> , Pulse 90.	{ Heart irregular, systolic murmur more pronounced. Digitalis
27,	Temp. 98 <sup>6</sup> , Pulse 90.	
28,	Temp. 98 <sup>6</sup> , Pulse 74.	Heart improved.
30,	Temp. 98 <sup>2</sup> , Pulse 94.	Some nausea.
31,	Temp. 98 <sup>6</sup> , Pulse 90.	Digitalis 1 tab. daily. Feels well.
Feb. 1,	Temp. 98, Pulse 90.	Some pain in neck.
2,	Temp. 98, Pulse 90.	Comfortable.
3,	Temp. 98 <sup>6</sup> , Pulse 84.	Comfortable. Menses ended.
4,	Temp. 98 <sup>6</sup> , Pulse 88.	Comfortable. Cevitamic acid discontinued.
5,	Temp. 98 <sup>4</sup> , Pulse 88.	Comfortable. Headrest.
6,	Temp. 98, Pulse 78.	Comfortable.
7,	Sent home.	
26,	She has done well at home. She has continued digitalis, has had no elevation of temperature, her joint pains are very mild now, and she is getting up higher in bed.	

The theory of Heparin in conjunction with Sulfapyridine is this: The culture of streptococcus viridans grows on the vegetation of the heart valves damaged by rheumatic fever. Heparin reduces coagulability of the blood and clears fibrin from these vegetations releasing bacteria into blood stream where they meet Sulfapyridine.

This case did not develop the classical signs

of subacute bacterial endocarditis, having no petachiae, except few under finger nails and no jaundice.

It is recommended bringing the coagulation time up to one hour. The highest I could bring this was 45 minutes. This did not disturb her menses. Neither was the Sulfapyridine brought higher than 2.6 mgm. per 100. Yet it seems to have worked well in this case.



## Calcification of the Iliolumbar Ligament

By HENRY G. HADLEY, M D., Washington, D. C.



This condition is not very frequent, and the first cases reported were by Howard P. Doub and C. L. Lowman<sup>1</sup>. The degree of the calcification present varies from an insignificant spur to long bands. The cause appears to be associated with spondylites deformans and arthritic changes. Infections and trauma appear to play a part. Doub believed that it was a manifestation of infectious arthritis in most cases. Simons<sup>2</sup> considered this condition to be an anomaly similar to sacralization. Although it was found in cases of arthritis, he thought they were not necessarily related. Reisner<sup>3</sup> considered that trauma or infection produced an impulse which induced a hyperplasia of the periosteum in the reparatory process.

This iliolumbar ligament is an accessory ligament of the sacroiliac articulation and has a strong, flat fasciculus of fibres originating from the transverse processes of the fourth

and fifth lumbar vertebræ. One part inserts into the posterior surface of the crest of the ilium, a greater part broadens itself upon the inner surface of the iliac fossa, and the outer surface of the later portion of the sacrum. This ligament is also called the ligament of Bertin after the French anatomist Excipere Joseph Bertin (1712 to 1781). Ossification or calcification of this ligament has been noted several times.<sup>4</sup> Doub considers this to be present as a factor in some cases of lower back pain. Simon described the form present with advancing years as an accessory symptom of arthritis and the complete form as a developmental anomaly.

This condition is found more often in females who have arthritic tendencies and who are in the fifth decade of life. If ossification is complete, there is no pain with movement, but as the movements of the lower vertebral column are transmitted directly to the pelvis, there is apt to be injury or strain to certain muscle groups as a result.

### BIBLIOGRAPHY

1. Doub, Howard P.: "The role of ligamentous calcification and in lower back pain." *Am. J. Roentgenol.*, 12:168, 1924.  
Lowman, C. L.: "Role of iliolumbar ligaments in low back strains." *J. A. M. A.*, 1926, p. 100.
2. Simons, W. V.: "Die Verknöcherung des Ligamentum iliolumbale." *Acta Chir. Scand.*, Stockholm, 1936, 67:767.
3. Reisner: "Die Verknöcherung des iliolumbale und ileosacrale." *Röntgenpraxis*, 1932. 3H, 22:1026.
4. Schredl, Leo: "Röntgenologische Studien Über die Verknöcherung der Bänder unter besonderer Berücksichtigung des Ligamentum Iliolumbale." *Arch. F. Orthop. und Unfallchir.*, Berlin, 1932, 31:301-15.  
Willems et De Caestecker, J.: "Ossification du ligament de Bertin." *Bull. et Mem. Soc. d. Chir. d. Paris*, 1921, 47:631-33.

## *The President's Page*

*To the Members of the Maine Medical Association:*

I am writing as the echoes of the 88th annual session fade away. The session at Rangeley passes into the records and becomes a part of the History of the Maine Medical Association in which we all take a just pride. It was a pleasant and interesting meeting. Incidentally "that Bangor crowd knows how to enjoy itself." I would like to elaborate especially on three factors. First, I want to have every member realize the hard work accomplished by the Scientific Committee. Merrill S. F. Greene of Lewiston, Chairman, Herbert C. Scribner of Bangor, our Chairman for next year, Currier C. Weymouth of Farmington and Mortimer Warren of Portland deserve and are hereby extended the thanks of all the officers and members.

Secondly, I would like to inform the Association that the House of Delegates voted to accept the invitation from the Penobscot County Medical Society to hold the Clinical Session during the autumn in Bangor. The addition to the Eastern Maine General has been completed and the physicians of the Bangor area are planning an instructive Clinical meeting.

Thirdly, I would like to bespeak the interest of all County Secretaries in arranging regular meetings for the coming year. I urge them to start now on plans, future commitments may be uncertain but uncertain plans are better than no plans at all. The strength of the State Association depends on good County meetings and strong County Societies.

The members have elected a loyal and faithful worker to be President-elect, Doctor Ebbett can be counted on at all times to give the Association sound and instructive counsel. The fifth district will have Norman H. Nickerson of Greenville, as Councilor; an experienced, prompt and efficient Secretary of his County Society for many years who will add strength to the Council. Members of the Council will miss the provocative, thoughtful and independent views of Doctor Bliss of Bluehill. But he assured us in nominating Oscar F. Larson of Machias that the Council is gaining an active, alert worker and we welcome the new Councilors.

The future is clouded, no man knows what danger the months will bring, but we know that the practice of medicine must continue, our hospitals must keep open and our State Society must organize thoroughly and carry on.

THOMAS A. FOSTER, M. D.,  
*President Maine Medical Association.*



## Editorials

### *"The Patient's Dilemma"*

For the past few years medicine and medical practitioners have been popular targets for snipers, in and out of the profession, regarding the high cost and the inadequacy of medical care in the United States. Curiously enough, all the paid parrots of this ilk have presented to the public, statements as facts which are based on inaccuracies and with a most remarkable literary coincidence in the source of material on which they base their arguments.

The publishers of the book with the above title, by Hugh Cabot, M. D., offer it as a "balanced and authoritative discussion" as to the ways and means of bringing to the neglected millions of our people so-called medical security. If the public and the profession is willing to admit that group medicine or a complete handover to the Federal government of the control of the profession, is the proper solution for the "inadequate, inferior and terribly expensive care that the American people are receiving today," further debate or consideration of this problem is surely superfluous. One fact, however, stares the desk pounders and radicals of all groups in the face. The barometer of the success or failure of medicine in the United States is reflected in our mortality and morbidity reports. The millenium has not been reached, probably never will be as long as human beings are what they are, but the records of the United States show results not equaled as a whole by any country and surpassed by none. The public as a whole and their elected and appointed officials would render no small service if the skepticism of organized medicine for panaceas, experiments and drastic legislation proposed to cure certain economic ills was regarded as being concerned for the best possible solution of the public welfare.

The book emphasizes in no uncertain terms Cabot's low esteem of the ability of the average general practitioner to cope successfully with the medical problems of today; the impression is created that the average physician is rapacious and stupid; that fee splitting is the rule rather than the exception and that

medicine can claim little or no credit for the good health of the people they serve. In print, as he has in public utterances, he condemns as obstinate and stupid the attitude of the American Medical Association in refusing to depart from the methods and procedures that has brought American Medicine to the position it occupies today and while admitting that the JOURNAL of the Association is of a high standard as regards scientific material he regards its editorial policy as inferior and controlled and dominated by a man capable of interpreting facts to suit his own purpose.

The comments of a very intelligent layman who read the book were quite illuminating. He felt that if the author had the purpose in mind of absolutely slandering his own profession he certainly did a good job but that whatever merits the book may have in pointing out defects in the American system of medical care was nullified by the obvious bias and prejudice which would certainly go far to create suspicion against physicians as a whole and to destroy confidence in a profession that enters deeply into the lives of all. Verbal distortions are regarded by some competent to judge as a frequent symptom of mental illness. The assumption by the publishers that the author is the embodiment of wisdom and incapable of being in error has certainly few sustaining facts to warrant such an illusion.

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### *Progress in Cancer Control*

Cancer control work in the Commonwealth of Massachusetts is under the charge of the Division of Adult Hygiene of the Massachusetts Department of Public Health and the following statements from an editorial in *The New England Journal of Medicine*, Vol. 22, No. 17, bears witness to the fact that education in cancer control is worthy of the effort and money expended in all ways. "Again, Massachusetts has the proud distinction of being the only state in the Union, indeed the only place in the world, which had a falling death rate in women. There was also

a slight drop in the rate of men.—The Massachusetts Medical Society may well congratulate itself on the work that has been done in furthering the diagnosis and treatment of cancer. But it must not regard its responsibility in any way lessened but rather heightened, by the fact that apparently this particular enemy of mankind is in grudging retreat."

Not only was there an increase in 1939 of patients at the cancer clinics over previous years, but what is even more assuring that education and further effort should encourage all workers in this field, is that some 22.4 per cent of the patients went to their physicians within a month of the first detection of symptoms of the disease. An all-time record this surely is and reflects in no small manner on the wonderful work that must have been done to obtain this accomplishment. Every worker on the subject of cancer knows full well that delay is a factor of the utmost importance to overcome. Delay in consulting a physician and delay in the institution of treatment. When any State can report such a large percentage of patients seeking an intelligent answer to their fears, justified or not, within

30 days, it can well indeed be proud of the work it has done.

It is very gratifying to be able to report that in Maine of the number of patients coming to the clinics a greater proportion are also coming early and it is also the same experience with private practitioners with the result that the number of cases capable of being relieved is increasing. The assistance of the Women's Field Army, in its State-wide educational efforts is doing a most important work in preventing those with early cancer from joining the tragic ranks of the incurables and through the Seannell Memorial Fund has made possible the treatment of appropriate cases by X-ray and radium to many unable to assume the burden themselves of the most expensive and essential items in cancer control. Perhaps if the public could know, and it should, of the wonderful work done in many States in cancer education and treatment it would realize that the captious critics who regard the entire profession as legitimate prey for their impugnments in books, on the screen and speaking stage might be considered as biased and absolutely unfair.

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*Robert R. Linton—Continued from page 199*

within a week or ten days, while the patient is lying in bed. When they get up there is a definite amount of edema, which can be controlled by a bandage or elastic stocking. This persists for two or three months and then gradually disappears. In some cases we have used heparin, but at present it is still expensive and in one or two cases, although the heparin stopped the formation of pulmonary infarct, the patient immediately developed more of them when the heparin was stopped. In these cases ligation of the femoral vein was resorted to, with excellent results and the patients were discharged from the hospital about two weeks following the ligation. In conclusion, ligation of the femoral vein in deep phlebitis, I think should be reserved for cases in which there has been a

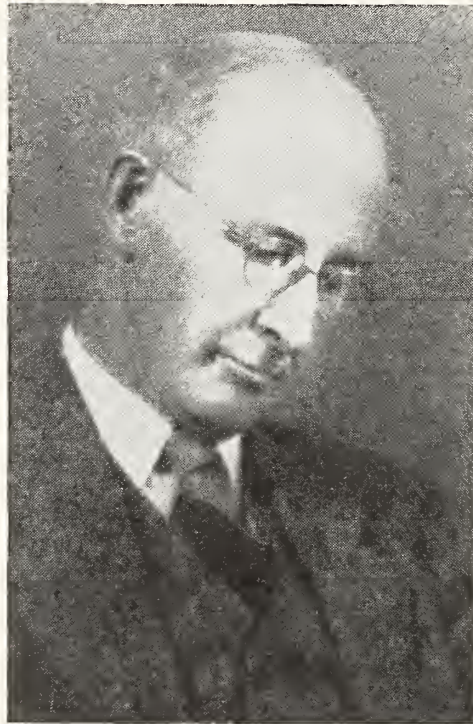
warning pulmonary embolus. As we have more experiences, we may find that we can detect which cases are going to have pulmonary emboli and separate them from those which are safe and do not need to have a ligation.

**SUMMARY.** A discussion of the subject of varicose veins has been given. This included the anatomy, pathology, etiology and treatment of varicose veins and varicose ulcers, both simple and postphlebitic types. Superficial and deep phlebitis is also discussed.

1. Faxon, Henry H. End Results in the Injection Treatment of Varicose Veins. *New England Journal of Medicine*, 208:357, 1933.

2. Linton, Robert R. The Communicating Veins of the Lower Leg and the Operative Technic for Their Ligation. *Annals of Surgery*, 107:582, 1938.





P. L. B. Ebbett, M. D.

### *The President-elect*

The past few years have been aptly characterized as the persecution period of medicine and the end is not yet. The men who have served us during these trying times deserve and have our hearty thanks and appreciation. What changes medicine faces in the days to come no one can tell; no one can predicate. Those who have led us in the past have been men who honored their profession and their profession gladly honored them. Your president-elect, Dr. P. L. B. Ebbett, brings to the office not only unquestioned loyalty to the aims and ideals of medicine but many years of unstinted service in behalf of his county society and the parent State association. A long service on the Council, the last year as

its chairman, he can also look on many years of hard and active practice with a resulting sympathy and understanding of the many perplexing problems that face us today.

No executive officer of this, or any other medical association, can carry on with success without the hearty and loyal support of the members at large and his official family. As we turn to our president and president-elect for leadership and devotion to their many difficult tasks they must be able to look with confidence to every member of the association lending all possible aid. The Aroostook County Medical Society acknowledges the merited honor paid one of its most esteemed and faithful members.

## *Nominating Committee Report*

The Nominating Committee, composed of Drs. E. H. Drake, Portland, Chairman, H. M. Howard, Rumford, L. D. Herring, Winthrop, Gilmore Soule, Rockland, M. A. Torrey, Ellsworth, and H. C. Knowlton, Bangor, made the following report at the Second Meeting of the House of Delegates, June 24, 1940, at Rangeley Lakes, Maine.

### *Standing Committees*

#### *Scientific Committee*

Herbert C. Scribner, Bangor, Chairman.  
Currier C. Weymouth, Farmington.  
Eugene E. O'Donnell, Portland.  
Leroy H. Smith, Winterport.

#### *Medical Advisory Committee*

Carl M. Robinson, Portland, Chairman.  
Allan Woodcock, Bangor.  
Stephen A. Cobb, Sanford.  
Willard H. Bunker, Calais.  
C. Harold Jameson, Rockland.  
Frank H. Jackson, Houlton.  
Forrest B. Ames, Bangor.  
The Secretary, ex-officio.

#### *Committee on Medical Education and Hospitals*

Adam P. Leighton, Portland, Chairman.  
Charles D. North, Rockland.

#### *Public Relations Committee*

Warren E. Kershner, Bath, Chairman.  
Frederick T. Hill, Waterville.  
Henry C. Knowlton, Bangor.  
Charles W. Kinghorn, Kittery.  
William A. Ellingwood, Rockland.

#### *Committee on Social Hygiene*

Benjamin B. Foster, Portland, Chairman.  
Earl S. Merrill, Bangor.  
Charles B. Popplestone, Rockland.

#### *Cancer Committee*

Mortimer Warren, Portland, Chairman.  
Magnus Ridlon, Bangor.  
Edward H. Risley, Waterville.  
William Holt, Portland.  
Bertrand A. Beliveau, Lewiston.

#### *Publicity Committee*

Thomas A. Foster, Portland, Chairman.  
The Secretary, ex-officio.



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## Necrology

### *William R. L. Hathaway, M.D., 1877-1940*

Doctor W. R. L. Hathaway, 62, practicing physician in the town of Milo, Maine, for 34 years, passed away May 26, 1940, following a brief illness. Doctor Hathaway was born in Garland, Maine, December 25, 1877; graduated from the Garland High School, Higgins Classical Institute, and Bowdoin Medical College, and in later years took several Postgraduate Courses in Boston, Massachusetts. He practiced in Garland for four years then moved to Milo, where he practiced continuously up to the time of his death. In 1898 he married Ida M. Snell of Garland, who survives him. The only near relative surviving him is an uncle, Rev. Henry Hathaway of North Berwick.

Doctor Hathaway was prominent in all phases of civic life. For several years he served as a member of the School Board of Milo and also served as School Physician. He had served in the Maine House of Representatives for three terms and in the State Senate for two terms. He was a member of Exeter Lodge, F. & A. M., and of Anah Temple, Ancient Order of the Mystic Shrine; a member of the Macabees, the Lions Club of Milo, and for many years a member of the Sewall Club of Augusta; he was an honorary member of the Milo Fire Department and a member of the Piscataquis County and Maine Medical Associations.

Doctor Hathaway was interested in sports of all

kinds, baseball and football being his major interests with basketball and boxing next.

The funeral services were held May 28 at his late residence on Elm Street, Milo, and were very largely attended. There was a beautiful display of flowers, mute evidence of the high esteem in which Doctor Hathaway was held, not only by citizens of his own town which he has served so faithfully for the past 34 years, but by friends throughout the State.

Governor Lewis O. Barrows was represented by Orman B. Fernandez of Old Town, member of the Governor's Council. State Highway Police was represented by Sergeant Francis J. McCabe and other members.

The honorary bearers were J. W. Thompson, M. D., of Bangor, H. C. Bundy, M. D., A. M. Carde, M. D., and N. H. Crosby, M. D., all of Milo, Martin L. Durgin, W. S. Owen, Louis Villani, Walter Day, and George Weston, all of Milo. The active bearers were Senator Francis Friend of Skowhegan, Representatives Arthur L. Peakes of Milo and Joseph W. Davis of Brownville, Aaron Day, M. C. Horne, and George McKusick of Milo.

Doctor Hathaway will be remembered as a staunch friend, an excellent physician, and a most highly esteemed citizen of Milo, and his death will be mourned by the entire community.

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## County News and Notes

### Aroostook

The Aroostook County Medical Society held its annual meeting at the Northland Hotel, in Houlton, on the evening of June 13. In the absence of both the President, and the Vice-President, the Secretary-Treasurer presided at the meeting. An interesting business meeting took place immediately after a lobster supper. The society voted to oppose coöperation of its members in connection with the Well Child Conferences as now sponsored and conducted by the State Bureau of Health and Welfare, and reiterated its stand of last year to oppose the Farm Security Administration Medical Care Program as heretofore presented to the Society, and elected the following officers:

President: Arthur T. Whitney, Houlton.

Vice-President: H. E. Small, Fort Fairfield.

Secretary-Treasurer: T. G. Harvey, Mars Hill.

Delegates to Maine Medical Association annual meeting: William Kirk, Eagle Lake; H. E. Small, Fort Fairfield.

Alternates: A. B. Hagerthy, Ashland; Oscar Norell, Caribou.

Board of Censors: Frederick Gregory, Caribou; H. C. Kimball, Fort Fairfield; P. L. B. Ebbett, Houlton.

The Medical program consisted of a talk by Wilfred Comean of Bangor on *Cardiac Drugs—Their Use and Abuse*, and four reels of moving pictures about the source of *Crude Curare* in the upper reaches of the Amazon River in South America (Gill-Merrill expedition) and the use of refined Curare as an adjunct to metrazol shock therapy in various psychotic states and a relaxant drug for use in spastic diseases. The moving pictures were shown through the courtesy of Dr. Brown of Presque Isle and were commented on by Mrs. Gill, wife of one of the leading expedition members.

A lively discussion of each part of the program ensued before adjournment.

T. G. HARVEY, *Secretary*.

### Oxford

A regular meeting of the Oxford County Medical Society was held at Bethel Inn, Bethel, Maine, Wednesday, May 29, 1940.

After the usual business session, Dr. George L. Pratt of Farmington, Maine, President of the Maine Medical Association, spoke on *Organization Affairs*.

After a fine banquet the speaker of the evening, Dr. H. Eugene Macdonald of Portland, took for his subject *Head Injuries*, which was most instructive and interesting, and was discussed by several physicians.

J. S. STURTEVANT, *Secretary*.

### Penobscot

The regular meeting of the Penobscot County Medical Association was held Tuesday, May 21, 1940, at the Bangor House, Bangor, Maine. Resolutions on the death of Bertram Lewis Bryant were adopted by the Association.

William M. Shedden, M. D., Chief of the Tumor Clinic at the Boston Dispensary, spoke on Intestinal Obstruction.

### Piscataquis

A meeting of the Piscataquis County Medical Association was held at the Braeburn Hotel in Guilford, May 24.

It was voted that we again hold a special meeting at Moosehead Lake this summer to which we should invite all neighboring County Associations.

Neil Swinton, M. D., of Boston, gave a most interesting and instructive talk on Diseases of the Rectum and Anus. This was illustrated by lantern slides.

N. H. NICKERSON, *Secretary*.

### Change of Address

#### Kennebec

Matthew T. Moorehead, M. D.

From Goodrich Medical School, University of Pennsylvania, Philadelphia, Pennsylvania  
To U. S. Veterans Hospital, Togus, Maine.

## Notices

### Venereal Disease Clinics

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Millinocket, Old Town, Portland, Presque Isle, Rockland, Rumford, Sanford, Waterville, Wilton, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on

request to the Director, State Bureau of Health, Augusta, Maine.

### American Congress of Physical Therapy

The 19th annual scientific and clinical session of the American Congress of Physical Therapy will be held September 2, 3, 4, 5 and 6, 1940, at the Hotel Statler, Cleveland, Ohio.

For information concerning the seminar and preliminary program of the convention proper, address American Congress of Physical Therapy, 30 North Michigan Avenue, Chicago.



## Book Reviews

### *"Workbook in Elementary Diagnosis—For Teaching Clinical History Recording and Physical Diagnosis"*

By Logan Clendening, M. D., Professor of Clinical Medicine, University of Kansas.

Illustrated.

Published by The C. V. Mosby Company, St. Louis, 1938. Price, \$1.50.

This book represents an attempt on the part of the author to create what might be called a shop manual for the medical student to be used during his clinical years. The clinic is looked at as a laboratory. In the laboratory the experiments are carried out according to definite instructions. This principle is here carried into the field of elementary physical diagnosis. The brief forms for history taking are expected to establish the correct habit of performing complete routine physical examinations. The diagnostic characteristics of certain findings, such as Corrigan's Pulse, Duroziez's Sign, Raynaud's Disease, Buerger's Disease, Babinski's Reflex and many others, are presented by means of the originally published descriptions by their respective authors. The names of the publications and the dates of their appearance are given in most instances.

### *"Synopsis of Pediatrics"*

By: John Zahorsky, A. B., M. D., F. A. C. P., Professor of Pediatrics and Director of the Department of Pediatrics, St. Louis University School of Medicine; and Pediatrician-in-Chief to the St. Mary's Group of Hospitals. Assisted by T. S. Zahorsky, B. S., M. D., Instructor in Pediatrics, St. Louis University School of Medicine; and Assistant Pediatrician to the St. Mary's Group of Hospitals. Third Edition.

Published by C. V. Mosby Company, St. Louis, 1939. Price, \$4.00.

This edition has experienced revisions and additions to a considerable extent conformative to recent modifications of the medical literature on pediatrics. The newer drugs have been included wherever these have been found to have been sufficiently tried to make their employment reasonably safe and promise good results. The tone of this text is rather conservative in nature and tends to tolerate the practice of old-fashioned reliable methods of coping with children's diseases. To adjust medical service to a child's home conditions is perhaps not the easiest way to practice

pediatrics but in the long run it is probably the more satisfactory way to medically control health and welfare in the home.

### *"Psychopathia Sexualis—A Medico-Forensic Study"*

By: Richard von Krafft-Ebing, M. D., Professor of Psychiatry and Nervous Diseases, University of Vienna. Only authorized English Adaptation of the Last German Edition Revised by Krafft-Ebing. With Introduction and Supplement by Victor Robinson, M. D., Professor of History of Medicine, Temple University School of Medicine.

Published by Pioneer Publications, Inc., New York, 1939. Price, \$3.00.

This is a reprint of the twelfth edition in commemoration of the birth of Dr. Krafft-Ebing (1840-1902). The author of the Introduction and the Supplement, who was born in the year of "Psychopathia Sexualis" first publication (1886) deems it a great honor to promote this newest republication. "There is no longer Vienna," he writes, "but among the monuments bequeathed to science by the Viennese teachers, the Psychopathia Sexualis of Krafft-Ebing will not be forgotten." The present make-up is more pleasing than previous ones. By employing a better grade paper and a larger format the type used in the Redman edition makes a good impression.

### *"Tumors of the Hands and Feet"*

Edited by George T. Pack, B. S., M. D., F. A. C. S., New York, N. Y. Assistant Clinical Professor of Surgery, Yale University School of Medicine and Cornell University College of Medicine; Attending Surgeon, Memorial Hospital for Cancer and Allied Diseases.

Published by The C. V. Mosby Company, St. Louis, 1939. Price, \$3.00.

This small volume represents a reprint of articles originally printed in "Surgery," January, 1939, and are here re-issued in book form as a symposium on neoplastic diseases as they invade the hands and the feet. New growths are usually most readily observed on exposed surfaces such as the hands and the face but due to impediment of function caused by them, those of the hands and feet demand earliest attention. In this thin volume most of the usually occurring types are described and the currently recommended methods of treatment are suggested.

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*“Injection Treatment”*

**INJECTION TREATMENT of Hernia, Hydrocele, Ganglion, Hemorrhoids, Prostate Gland, Angioma, Varicocele, Varicose Veins, Bursae and Joints.**

By: Penn Riddle, B. S., M. D., F. A. C. S., Assistant Professor of Clinical and Operative Surgery, Baylor University College of Medicine; Director of the Varicose Vein Clinic, Parkland Hospital, Dallas, Texas,  
with 153 illustrations.

Published by W. B. Saunders Company, Philadelphia and London, 1940. Price, \$5.50.

In spite of the fact that treatment by the injection of sclerotizing fluids has persistently been rejected by many reputable physicians, many patients equally persistently insisted that this method of therapy should receive preference to surgical intervention in their own individual case and ailment. Consequently it became necessary for the medical profession to perfect old methods and invent new ones in order to better serve their clientele.

Several books on the subject of injection treatment are in circulation, some of which have attained a fair degree of circulation. The volume under review presents several excellent features: It is comprehensive in that it covers the entire field in which this form of treatment is applicable; it is all-inclusive in that the structures under treatment are presented in their anatomic, physiologic, pathologic, and therapeutic peculiarities and relationships; it is authoritative in that all work described therein rests on successful performance of the technique employed; it is reliable in that it points out specific indications and contraindications; it is timely in that it supplies the physician with expert advice to perform successfully the injection treatment on selected cases.

*“Handbook of Orthopædic Surgery”*

By: Alfred Rives Shands, Jr., B. A., M. D., Medical Director of the Nemours Foundation, Wilmington, Delaware; Associate Professor of Surgery in Charge of Orthopædic Surgery, Duke University School of Medicine, Durham, North Carolina (on leave of absence).

In Collaboration with Riebard Beverly Raney, B. A., M. D., Associate in Orthopædic Surgery, Duke University School of Medicine.

Illustrated by: Jack Bonacker Wilson.

Published by The C. V. Mosby Company, St. Louis, 1940. Price, \$4.25.

Only three years after the appearance of the first edition of this helpful and inexpensive Handbook, it has become necessary to issue a second edition. Much of the previously presented material has been removed and replaced by the latest obtainable information concerning therapeutic measures available at the present time. The bibliography, sixty-three pages of it, selected from medical literature written in the English language, has been completed up to July, 1939. There are 154 illustrations, all of which have been drawn by the hand of Mr. Wilson with special emphasis to the site of pathology under discussion. This new edition of the Handbook of Orthopædic Surgery should prove to be a welcome addition to the library of the medical student and the general practitioner interested in the re-establishment of function due to pathology of the long bones and tissues associated with them.

*“Clinical Roentgenology of the Alimentary Tract”*

By: Jacob Buckstein, M. D., Visiting Roentgenologist (Alimentary Tract Division), Bellevue Hospital, New York City; Consultant in Gastro-Enterology, Central Islip Hospital,  
with 525 Original Illustrations.

Published by W. B. Saunders Company, Philadelphia and London, 1940. Price, \$8.75.

Roentgenography and the correct interpretation of roentgenograms has become a definite necessity in many branches of specialized medical practice. The author of this book shows in more than five hundred well selected illustrations clearly typical roentgenologic demonstration of pathologic lesions of, in, and near the human gastro-intestinal tract. The text which accompanies and describes these illustrations is arranged systematically, a chapter being devoted to every organ or section of the gastro-intestinal tract. Nearly every chapter is roughly subdivided into anatomic considerations of the normal organ; technic of roentgenographic examinations; roentgen diagnostic characteristics, and typical illustrative case reports.

The writer of this book has selected the best material from his twenty years' practical medical roentgenography. He has tried to keep in constant view the needs of the specialists in the field, the roentgenologist, the gastro-enterologist, the internist and the surgeon. In addition the needs of the general practitioners in private practice are well cared for. The teaching value of the text is of a high quality.

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*"The Compleat Pediatrician"*

*Practical, Diagnostic, Therapeutic and Preventive Pediatrics*

Third Edition.

For the Use of Medical Students, Interns, General Practitioners, and Pediatricists.

By: Wilburt C. Davison, M. A., D. Sc., M. D., Professor of Pediatrics, Duke University School of Medicine, and Pediatricist, Duke University. Formerly Acting Pediatrician in Charge, The Johns Hopkins Hospital.

Published in Durham, N. C. Printed by Seeman Printery for Duke University Press, 1940. Price, \$4.00.

The author expresses surprise at the complete sell-out of the second edition. He suspects that curiosity was chiefly responsible. In order to convince himself whether there might be some other reasons, he presents this greatly enlarged and still more compleated "Compleat Pediatrician." In order to satisfy his own curiosity, he read 3,700 articles dealing with pediatric problems as contained in recent acquisitions to the medical literature. What he found was enough to cause him to change 10,000 lines in his new third edition. Now curiosity leads to the search for new knowledge and the search for it leads to the finding of it. For a small price every graduate of medicine can satisfy his curiosity in matters of pediatrics by the purchase of a copy of "The Compleat Pediatrician," third edition. This is still the most unique, the most complete encyclopedic source of information in one volume in existence so far as this reviewer knows. The knowledge accumulated here is thoroughly reliable and practicable.

*"Introduction to Medicine"*

By: Don C. Sutton, M. S., M. D., Associate Professor of Medicine, Northwestern University School of Medicine; Attending Physician, Medical Division of the Cook County Hospital; Chief of the Cardiac Clinic, Cook County Hospital, Chicago; Attending Physician, Evanston Hospital.

With Introduction by Ada Belle McCleery, R. N., Superintendent Evanston Hospital, Evanston, Illinois,

with 144 Text Illustrations and 14 Color Plates.

Published by The C. V. Mosby Company, St. Louis, 1940. Price, \$3.25.

This is a textbook of medicine written for the student nurse. The author's plan was to present, with a minimum of wordiness a maximum of medical importance, information of the kind which a practicing nurse requires in her every-day practice. Full recognition is taken of the fact that a medical textbook for nurses must be of a composition commensurate to her preliminary training as well as to the needs of her duties. Information of a nature required by the medical student, when presented to student nurses tends to produce a clouding of the nurse's field of action or fails to impress the nurse's nervous system appropriately. Symptoms, diagnosis, treatment, description of pathology, laboratory requirements and disease entities are presented with a minimum of detail. Dogmatic adherence to any one doctor's statements of facts is not encouraged but the necessity to the adherence to well established principles is frequently stressed.

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\*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, *AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES*, Vol. 23, No. 2, pages 201-206, March, 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA, PA.



# The Journal of the Maine Medical Association

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Volume Thirty-one

Portland, Maine, August, 1940

No. 8

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## *The Surgical Treatment of Varicose Veins\**

By JAMES M. PARKER, M. D., Portland, Maine

"This is a case in which there is no question about the patient's life or death and I think it very probable that many of you may pass by the bedside of such a patient without thinking it worthy of attention. — Although the patient will not probably die of the disease, yet without great care, it may render her miserable." So wrote Sir Benjamin Brodie in 1846.<sup>1</sup>

The history of the treatment of varicose veins by excision, ligation, injection and all these methods combined has been replete with reports of glowing successes and equally dismal failures. It is of some interest that up until the last two decades the incidence of failures has been proportional to the adequacy of the individual worker's follow-up.

In 1877, Schede made one of the first attempts to apply anatomical and physiological principles by ligating the saphenous vein low in the thigh<sup>2</sup> either by open operation or percutaneous ligation. Madelung in 1884<sup>3</sup> introduced a formidable procedure for extirpation of the saphenous vein and its varicose radicles through a long incision on the thigh and leg; a procedure that was sound in theory but prohibitive in magnitude. Although

Tavel in 1904 first used ligation and injection treatment<sup>2</sup> with an intervening period Shiassi<sup>2</sup> deserves the credit for combining the two at one sitting. Viewing the then current chaos surrounding this subject John Homans began his paper in 1916. "Varicose veins and their attendant ulcers have been offering and may continue to offer a fruitful field for surgical failure."<sup>3</sup> In that paper he emphasized the advisability of ligating the internal saphenous vein high above any of its collaterals to prevent recurrence— a point that was ironically enough, to take much of the sting out of his introductory statement—for those who have taken cognizance of it.

At present surgical treatment is divided into two schools. Advocates of injection and those using combined surgery and injection. According to a recent survey of reported results, recurrence after injection is from two percent in six months to ninety-eight percent in cases followed longer, after combined therapy, from zero percent to sixty-six percent. What is the answer?

Varicose veins of the lower extremity are the end result of widening and lengthening of the veins superficial to the deep fascia in

\* Read at a meeting of the Portland Medical Club, April 2, 1940.



which the flow of blood in erect posture is reversed as a direct result of incompetence of the valves between the deep and superficial systems. The anatomical distribution of the veins ordinarily involved in varicosities is usually described in three divisions. The long saphenous arises from the femoral just below the inguinal ligament, pierces the deep fascia at the Fossa Ovalis, courses down the medial aspect of the thigh just behind the internal condyle at the knee, traverses the medial aspect of the calf where it has many superficial tributaries, and after passing anterior to the internal epicondyle at the ankle forms the dorsal venous arch of the foot. Within its upper two and one-half inches it has from three to five tributaries which show rich collateral anastomosis with the internal pudendal, the gluteal and the epigastric venous systems. One of these tributaries may have communication with the saphenous trunk lower in the leg. Faxon<sup>4</sup> has emphasized the importance of these high tributaries. Anatomical studies by Edwards<sup>5</sup> indicate that in the thigh the long saphenous commonly is reduplicated and not uncommonly receives one or more perforating branches from the femoral.

The lesser saphenous vein arises from the popliteal, pierces the deep fascia at the level of the flexion crease of the knee, gives off one or more branches to the long saphenous system, courses down the posterolateral aspect of the calf and behind and below the external malleolus communicates with the deep and superficial venous arches of the foot.

The communicating veins of the lower leg, recently beautifully worked out by Linton,<sup>6</sup> constitute the third group. These veins perforate the deep fascia from the long and short saphenous systems to the peroneal, posterior tibial and anterior tibial on the lateral, medial and anterior aspects of the leg respectively.

It is an important factor that all these veins except the last mentioned group lie superficial to the deep fascia and being unsupported by muscle and fascia are subject to marked physiological dilatation under conditions of increased pressure.

The pathological physiology of varicose veins is dependant upon three main features

—the defective valve, the recanalization of thrombosed vessels, and the development of collaterals. Valvular incompetence, as pointed out by Freeman,<sup>7</sup> may lie in the congenital absence of a critical valve such as the one that normally exists in the femoral just below Poupart's ligament. Increased back pressure may lead to dilatation of a vein and relative incompetence of the valves. Paradoxically, Adams<sup>8</sup> has demonstrated after multiple venous pressure determinations that pressure readings in the saphenous system correspond closely to calculated pressure for a column of blood the height of the left auricle, and are essentially the same in varicose and non-varicose veins. Pressure readings under conditions of straining or coughing show a marked increase in incompetent veins over competent or ligated veins. It seems reasonable to agree with Freeman<sup>7</sup> then, that varicose veins are the result of a mechanical defect just as much as in a hernia. The third factor in valvular incompetence may have been the involvement of the valve in a thrombophlebitis which as shown by Edwards<sup>5</sup> results in its destruction.

The second important feature in pathology of varicose veins lies in the marked tendency toward recanalization of thrombosed vessels. This has been well demonstrated by Howard, Jackson and Mahon<sup>9</sup> in their study of the mechanism of recurrence after injection treatment. The rapidity and completeness of this process is directly proportional to the degree of back pressure to which the thrombus is subjected from above. It is a double-edged sword because the attendant valvular disintegration results in a venous trunk that is completely rather than relatively incompetent.

Finally the development of collateral circulation, a salutatory process when it occurs to compensate for innominate or iliac thrombosis with its characteristic picture of dilated trunk collaterals, is a similarly detrimental factor in the cure of varicose veins. Following occlusion of a major superficial venous trunk, if it is anatomically possible, superficial tributaries will restore by collateral anastomosis the continuity of the occluded trunk. Subjected to increased volume flow, collaterals dilate many times, become relatively incompetent. Retrograde blood flow

into the varicose superficial system is thus reestablished. The importance of this mechanism in the recurrence of varicose veins subjected to an ill-advised type of surgical procedure has been repeatedly emphasized.<sup>3 4 5</sup>

With these criteria in mind we are perhaps in position to define the desiderata of a rational treatment for varicose veins.

First, accepting the etiological factor of a congenital mechanical weakness, it must deal with retrograde blood flow and the constant water hammer effect of increased abdominal pressure by ligation. Second, the ligation must be done at a point and in a manner to obviate recurrence through collaterals. Third, it must evaluate the importance of, and treat accordingly incompetent perforating veins in the thigh and in the calf. Fourth, after dealing rationally with all avenues of reversed blood flow and increased venous pressure effects it may resort to injection therapy to obliterate varices. Finally, but of paramount importance is demonstrable patency of the deep veins which is the fundamental requirement for any treatment of varicosities.

In the evaluation of the clinical problem of a case of varicose veins there are several tests which are of value. The Schwartz test as modified by Homans<sup>3</sup> is of considerable aid in locating the position of the major venous trunk. With the fingers of the left hand resting on the antero-medial aspect of the thigh, the examiner taps varicosities in the calf, transmitting an impulse which can be felt by the left hand over the venous trunk. This test does not establish the presence of venous incompetence as it is frequently positive over a normal saphenous vein. Inasmuch as the presence of an incompetent perforating vein in the thigh considerably dampens the transmitted impulse, the test is often of value in localizing such a perforator. A strongly positive Schwartz test is obtained from the calf to the level of the lowest incompetent perforator, transmission of the impulse above that perforator will be weak or absent.

The Trendelenburg Test is begun with the patient recumbent and the leg elevated to empty the vein; pressure is applied to the long saphenous at the fossa ovalis while the patient stands. If the varices remain empty

until pressure is removed, then fill rapidly, the test is singly positive indicating simple long saphenous incompetence. If the varices fill slowly (within one-half minute) in spite of saphenous pressure, then rapidly from above on removal of pressure, the test is doubly positive and indicates both an incompetent long saphenous and incompetent communicating veins. Where there is question of short saphenous involvement, it is necessary to apply pressure or a tourniquet in the popliteal space just below the flexion crease of the knee to rule out incompetence of this system independent of the long saphenous.

The unreliability of the Trendelenburg Test in the presence of one or more incompetent perforating veins in the thigh, led Ochsner and Mahorner<sup>10</sup> to devise their comparative tourniquet test. This test depends on the fact that varicose veins which fill on standing are partially emptied on walking, through the pumping action of the deep venous system. A tourniquet is placed successively about the thigh from above downward with the patient walking and the degree of venous distention with the tourniquet at different levels is noted by observation and palpation. If there are incompetent perforating veins in the thigh, there will only be partial emptying of the veins with the tourniquet high on the thigh and conversely, emptying will be relatively complete when the tourniquet is placed just below the lowest incompetent perforator.

It is quite apparent that in the presence of obstruction to the deep venous system the above sequence of events will be reversed, superficial veins will not empty on walking, will become more tense and distended when occluded with a tourniquet. Should this occur, the underlying pathology may be further confirmed by the occurrence of pain and cramps in such a patient who walks for fifteen minutes with a firm elastic bandage applied to the leg.

Finally, although careful application of these clinical tests usually makes possible an accurate anatomical diagnosis, it is wise to warn the patient that there may be additional points of venous incompetence that will have to be secondarily attacked.

The technical aspects of high saphenous ligation will be only briefly dealt with here. They have been well described by a number



of surgeons but Faxon<sup>4</sup> in 1934 emphasized its value and application.

For high saphenous ligation a three-inch incision is made over the Fossa Ovalis just below Poupart's Ligament and centered one-half inch medial to the femoral pulsation. The saphenous vein will be found lying between the deep and superficial fascia. The cleavage plane for dissection of the vein is just outside the adventitia and once defined can be easily followed. The main trunk and all branches in its upper two inches are dissected out up to the sapheno-femoral junction. Tributaries are doubly ligated and cut. After visualization of the femoral, the saphenous is doubly ligated just distal to the sapheno-femoral junction and again lower down to allow excision of a segment of the vein. The question of retrograde injection of sclerosing solution at the time of operation is a debated one. Ochsner and Mahorner<sup>2</sup> routinely inject two to four c.c. of Sodium Morrhuate into the distal stump at operation. Faxon<sup>4</sup> of the Massachusetts General Hospital Circulatory Clinic used to inject up to 10 c.c. of Varisol at operation but has discontinued this practice because of the marked phlebitic reaction that sometimes results and because good results are obtained by later local injections of prominent varices. Freeman<sup>7</sup> of the University of Pennsylvania Hospital, thinking of the danger of pulmonary embolus uses sclerosing solution at operation only when he is sure there are no incompetent perforating veins in the thigh.

In the presence of one or more incompetent perforating veins, filling of the varicosities from above will still continue unless the residual incompetent channel is eliminated. Instead of ligation of each individual perforator in the thigh, a procedure of some magnitude in the presence of several, Ochsner and Mahorner<sup>2</sup> have found supplementary low ligation of the long saphenous, just below the lowest incompetent channel, a minor and eminently satisfactory procedure. This can easily be done through a small incision and is wisest deferred to ten days after high ligation, giving the surgeon an opportunity to re-evaluate the clinical picture after the latter procedure.

An occasional case will show varicosities of the lesser saphenous system which do not fill

from a tributary of the long saphenous, but directly from the popliteal. Here simple ligation of the short saphenous just distal to its junction with the popliteal, followed by local injections is effective.

The postoperative care of these cases is important. A firm pressure dressing is placed over the wound and hemostasis encouraged by keeping the patient at rest in bed for an hour. The involved leg should be firmly wrapped in elastic bandage which compresses the varices and aids deep venous return. The patient is then encouraged to walk for two minutes out of each hour for the remainder of the day as a prophylactic against deep thrombosis and pulmonary embolism. In an extensive review of the literature Ochsner and Mahorner<sup>11</sup> have found no reported case of pulmonary embolus where this ambulatory treatment was used.

There is a rather characteristic type of case that comprises about 2 percent of varicose vein problems. Commonly a history of phlebitis in the past can be obtained. The patient presents the usual picture of long saphenous incompetence, but it is complicated by ulceration, pigmentation and atrophy of the skin on the inner aspect of the lower leg usually just above the ankle. Because of the thickening and chronic inflammatory induration of the subcutaneous tissues it may be difficult to determine clinically the presence of incompetent communicating veins in the lower leg. If the Trendelenburg Test can be satisfactorily applied it will be found to be doubly positive — i. e. — with retrograde flow from the thigh interrupted, there will be filling of the varices from below.

The clinical course of such a case is characteristic as has been pointed out by Linton.<sup>12</sup> The ulcers heal with rest elevation and wet dressings. The indicated surgical therapy is given in the form of ligation for the incompetency of the saphenous system. When the patient becomes ambulatory, the skin changes, subcutaneous induration and eventually the ulceration recur. This sequence of events, healing of ulcers with rest and elevation and recurrence on resumption of activity in spite of adequate surgical attack on incompetence of the superficial venous systems is practically diagnostic of the presence of incompetent communicating veins in the lower leg.

The clinical picture, anatomical studies, and surgical attack on the relatively rare, but difficult problem as described by Robert Linton<sup>12</sup> of the Massachusetts General Hospital Circulatory Clinic should be read in the original.

In detailed anatomical studies<sup>6</sup> Linton has demonstrated three groups of communicating veins in the lower leg—on the medial aspect those emptying into the posterior tibial on the antero-lateral aspect, those emptying into the anterior tibial on the postero-lateral aspect, those emptying into the popliteal and peroneal veins. Any one of these groups may be incompetent as result of a previous phlebotic process, but as is made quite evident by the frequent location of intractable ulcer on this aspect, the medial group is most commonly involved.

Prerequisite to the surgical attack on this problem are healing of ulcers by conservative treatment of bed rest and elevation, maximal subsidence of all edema and inflammatory induration, bacteriological evidence of freedom from hemolytic streptococcus infection and adequate ligation for superficial venous incompetence. A linear incision is made on the medial aspect of the leg from the internal condyle of the tibia to just behind the internal malleolus at the ankle, down to the cleavage plane beneath the deep fascia. The anterior flap is dissected forward to the medial border of the tibia. In the lower one-half of the field the lamina profunda of the deep fascia is divided exposing the posterior tibial vessels and nerve. The posterior flap is elevated to a point between the two heads of the gastrocnemius muscle. Throughout the extent of the incision as many as ten incompetent communicating veins may be demonstrated; these are doubly ligated and severed. Linton recommends a meticulous silk technic and splinting of the leg for ten days post-operatively. He has reported on 50 cases done personally.

There are certain contraindications to active surgical treatment of varicose veins. One of these is of course, senility or debilitating disease. The existence of impairment to arterial blood supply, if marked, makes any form of active treatment inadvisable. In moderate arterial impairment associated with varicosities the condition of the limb may be improved by high ligation. Injection

therapy in any case is unwise because of the lowered resistance to infection and trauma. Persistent deep thrombosis places collateral demands on the superficial system making any form of treatment of varices illogical. Benign pelvic tumors that increase abdominal pressure and obstruct venous return should be corrected before surgical treatment of veins. Pregnancy, not a true contraindication, constitutes rather an indication for early conservative and later active treatment.

The results of modern surgical therapy of varicose veins—combined ligation and injection—are probably better than for any other form of treatment. In 1937, Ochsner and Mahorner reported follow-up studies on 23 cases, twelve treated with mid-thigh ligation alone with the recurrence of 50 percent, eleven treated by high ligation alone plus injection with 18 percent recurrence. In their Monograph<sup>11</sup> published in 1939 they place the recurrence rate of cases treated by one or more ligations and injections at 10 to 15 percent. The best follow-up study by Faxon and Barrow<sup>14</sup> in 1938 covers 367 operations followed for one and one-half years. They report 55 percent perfect results, 25 percent satisfactory results, 20 percent failures. Analysis of their failures revealed that 39 percent could be attributed to faulty operation, 46 percent to incompetent communicating branches, 4 percent to short saphenous involvement and 3 percent only to improper selection of cases. It must be remembered that at the time of the treatment of their series of cases the importance of incompetent perforating branches had not been fully realized and dealt with.

#### CONCLUSIONS

Varicose veins are not a threat to life, but may so interfere with a patient's comfort and activity as to make life extremely difficult. As such they constitute a surgical problem deserving of painstaking consideration.

The pathology is subject to certain definite anatomical limitations. By the application of clinical tests an accurate anatomical diagnosis can be made.

Successful surgical therapy is dependent upon interruption of the retrograde blood flow

*Continued on page 230*



## *Attendant Nurses*

By ALFRED WORCESTER, M. D., Sc. D., Professor Emeritus,  
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The family physician is still in need of more nursing assistance. The modern profession of nursing which in many directions has proved to be of inestimable value, has not supplied the great need of home nursing. Few of these highly educated nurses like such service. Few families can afford to pay for it. Moreover in few cases of family sickness is such expert nursing needed. When it is needed such patients are generally sent to the nearest hospital. As a result of the shortage of suitable assistants in the ordinary run of cases the doctor's service is heavily handicapped. The families where there is sickness have either to put up with ignorant helpers or else to wear themselves out in the care of their sick. Even if it is not the house mother who is herself the patient, the need of help in the housework is always acute. In nine out of ten cases the service needed can well be given by partially trained nurses, just as it is given in most hospitals by the partly trained pupil nurses.

At the time of Queen Victoria's Golden Jubilee when she was given a thank-offering by British women, she decided that it should be used for supplying the nursing needed in the smaller homes of her people. By the advice of a committee of doctors and nurses, including Florence Nightingale, the Queen's Jubilee Nursing Organization was founded upon the model of the Metropolitan and National School of Nursing. In this school the pupil nurses after a few months of preliminary training were given one year of hospital service. They were then given a term of home nursing under visiting supervision. In 1894, when we besought Miss Nightingale's advice, she urged that our Waltham School follow this lead rather than the trend of American hospital schools towards an increasing scientific education. She highly approved our preparatory course and also our insistence upon training in home nursing for such service.

After holding fast to these ideals for a

half century the Waltham School found it impossible to continue. Although generous gifts had been received from its trustees and other friends, the School's main support had always been the earnings of its pupil nurses. The hospital which the School had established could no longer pay anything for our pupil nurses' service. And yet an increasing proportion of their time had to be spent in the hospital in order to meet the demands of the State Boards of Registration and Nurses' Associations. The preparatory course and the district visiting nursing, which Waltham had introduced in this country, had been gradually adopted by other training schools, and accepted by the State Boards and Associations. But as for any part of the training being given in patients' homes, that was anathema. In fact, Waltham was warned against continuance during the preparatory course of any training in the home care of patients although under constant supervision of visiting nurses who were masters of the arts of both nursing and teaching. Against the convictions of the leaders of American nursing that hospital training suffices for all kinds of subsequent service, including that of family nursing, the Waltham School made no headway. But because of our insistence upon following our ideals in this respect, our graduates were refused recognition by State Boards of Registration and Nurses' Associations. In consequence some of our graduates who had won distinction in war and other public service, began urging that our School should be hospitalized. That, forsooth, would secure for them the coveted recognition. Some of our younger doctors sided with them, frankly acknowledging their lack of interest in family nursing. Instead of accepting this advice, the trustees of the School decided to devote its whole strength to the training of nurses for home nursing.

We offered such a course to graduate nurses who might be aware of the need of training in this neglected specialty. As yet

there have been no applicants for such a course. At the same time we began training attendants on much the same plan as that adopted for the Queen's Jubilee nurses. In shaping this new course we had the advantage of the experience of one of our graduates, Miss Charlotte Macleod, who had organized the Victorian Order of Nurses in Canada, the Richards M. Bradley School of Attendant Nurses (the Brattleboro Mutual Aid Association in Vermont), and the first Boston school of visiting nurses. We also had the help of generous advice from the Boston Household Nursing Association, one of the earliest and most noteworthy schools for attendant-nurses. Careful attention was also given to the programs of the various similar New York Schools.

Without discussion of the methods employed in other schools, and certainly without invidious comparisons, the following report is offered of what the Waltham School has done and is doing. We well knew that the success of the venture depended upon the kind of women accepted for training. Besides the requisites of perfect health and a common school education, which could be ascertained from certificates and correspondence, the more important requisites of a pleasing personality and a genuine bent for the nurse's calling could be found out only in personal interviews either by our teaching staff or by friends known to be good judges of character, who were within easier reach of the applicants. We made a slow start in September, 1938. The School home can accommodate a class of thirty, but we decided upon classes of ten each for three months of preparatory training. This course was much like what the School had given to its pupils for the previous half century. There was less class teaching of elementary science, but the same thorough teaching and drilling in asepsis, in dietetics and other branches of housekeeping, especially as needed in the home care of patients. In the Baby Hospital the pupils were given practice in the care of infants. As assistants to Visiting Nurses they were also given practice in the home care of convalescents.

The worth of this preliminary training could first be proved in the subsequent hospital service of these pupils. Fortunately

places were found for them where cordial coöperation in their training was given by the other nurses, by their teachers and the hospital staff. After their year of hospital service they returned to the School with the highest commendation. Then came the final test of their usefulness in home nursing under the School's supervision. Their success was glorious. Their service had not only aided the families in the care of their sick but also in the housekeeping. The attending physicians were loud in their praise. No longer could there be any question of the worth of our venture. But, alas, the question now is how can the School continue it. The expense of our preparatory course has always been our heaviest burden. The \$60 entrance fee pays but a small fraction of the cost of it. Nor have we ever been able to derive any income from the work of the probationers, because as fast as they acquire skill in any practice they are given something else to do. The only possible income from their service is in their few months of private nursing after their hospital year. And this is partially offset by the cost of their board at the School home, and of their allowances. During their year of hospital service the School is at no expense, as they then are given their board and their \$6 a month allowance. The large overhead expenses of the School while establishing this new course, have been met only by serious inroads upon its modest capital. But it would be unfair to leave the impression that these annual deficits have been wholly due to the cost of the attendant course. The Waltham Training School for Nurses was founded, and its fine buildings and its endowment were given for the purpose first, of supplying all the nursing needs of the community, and, second, of training nurses for such service. After the hospital which the School had established, had a nurses' school of its own there still remained the need of family nursing in homes where only a part or nothing could be paid for it. To meet this need the School established a Nursing Service Bureau, hiring for the purpose trained nurses, and also partially trained or attendant-nurses, thus to supply the service formerly given by the School's pupil nurses. The need of more and better trained attendants was what forced the School to under-



take attendant-nurse training. And yet, as must be noted, such a course of training as the School is now giving attendants could not be given without the opportunities afforded by the Nursing Bureau for their practice, in patients' homes, of what is being taught in the School. The main purpose of the School has always been to arouse, or at any rate to foster in the pupil's heart an enthusiasm for the nurse's calling: in other words to pass on the love of helping the helpless that inspired Florence Nightingale. This, for example, can not be done merely by teaching how to prepare trays of appetizing food, but it can be done by sending the pupil nurse with the tray she has prepared to a hungry patient in some impoverished home.

This account of Waltham's latest undertaking in nurse training it is hoped will serve as a basis for a critical study of the whole attendant-nurse problem. In our analysis we must look at it from several different standpoints.

I. Taking first the effect upon the medical profession of a sufficient supply of attendant-nurses, it is evident that such service would be of less value to the specialists than that given by nurses who have been fully trained. The same probably holds true for doctors whose practice is in rich families. With attendant-nurses more of the doctor's time must be given to teaching what he wants done for his patient. He will have to make more visits because attendants are not trained to act as his substitute. But for the doctor whose practice is in the common run of families, where fully trained nursing could be paid for only by mortgaging the homestead, is there any doubt that the assistance of attendants would enable him to give better medical service? Even before the doctors have sampled such assistance, it is highly probable that they would vote overwhelmingly in favor of the attendant-nurse movement.

II. Equally probable it is that in a canvass of the nursing profession the vote would be as overwhelmingly against the extension of attendant-nursing. That is natural, for at first sight this new movement seems to them nothing short of hostile rivalry. After their arduous training in the hospital schools, where they have been taught to consider their

training fits them for family nursing, it is no wonder they resent the competition of those who have had insufficient schooling to enter the regular schools and only a third as much hospital training. Still more of a provocation it is that the attendants work for twelve instead of eight-hour periods and for half the registered nurse's wages. It will be difficult to persuade them that the service of attendants is designed for a different field—for families who cannot afford to pay for trained nursing, and for families where such expert service is not needed, but for convalescents and chronics, for helpless infants and aged patients, and for housework; in short for such service as most registered nurses dislike. Their dislike of such service as housework is very natural, for it offers small opportunity for their qualifications. They have been trained for a higher grade of service than that of housework, and yet some sharing of that is what is most needed by the stricken household, for it affords the family the privilege of sharing in the nursing care of their loved ones. In critical cases where expert nursing is needed for at least part of the twenty-four hours, there is another large field for attendants' service as the trained nurse's assistant. But not until they have had further acquaintance with such assistants and their more humble role can the registered nurses be expected to favor attendant-nursing. The largest hope for its favorable recognition lies in the association of trained nurses with the pupil attendant during her hospital service.

III. The problem must now be studied from the hospital viewpoint. The introduction into America of training schools for nurses, now nearly seventy years ago, made possible the enormous multiplication of hospitals. They thus obtained nursing service for next to nothing, if compared with the cost of their kitchen and laundry service. In most of the small and especially in the private hospitals the education given to their pupil nurses was a shamefully small return for their hard work and meager allowances. But under the pressure of graduate nurse Associations exerted by State Boards of Registration, this disgraceful injustice has largely disappeared. As a result of the cost

of the required improvement of their training schools, many of the smaller hospitals have become financially embarrassed. Some of them have had to give up their schools and for their needed nursing service to employ trained nurses and women-helpers. The best private hospitals depend largely upon graduate nurses whose service is paid for by their wealthy patients. In view of these conditions in the hospital world, it might confidently be expected that the attendant-nurse movement would be hailed with joy by the small hospitals. To have pupil attendants for a year after their preparatory course, at the cost of their board and six dollars a month allowances, would be considered nothing short of a godsend. And this is just what has happened. Some of the hospitals now depend entirely upon successive classes from the attendant nursing schools. Others are glad to take a few at a time as a re-enforcement to their staffs of graduates or training-school pupils. But this advantageous mingling of the different kinds of pupils has been forbidden by some Boards of Registration. Such a stupid prohibition as this may not last, yet while it is in force pupil attendants can have their hospital service only in hospitals which have no regular training schools. The number of such hospitals is increasing.

After even this hasty survey of the attendant-nurse movement the conclusion seems inevitable that the movement is sure to advance with increasing rapidity. And the question of whether it shall have State regulation is already under consideration. If wisely designed such regulation would ensure a desirable uniformity in the attendant-nursing schools.

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From the point of view of the clinical management of the individual case of tuberculosis and from the broader aspect of public health control of the disease, *no one test occupies a position of greater importance and significance than that of the sputum examination.* The persistence of a positive sputum is regarded as clear evidence that pathological activity of the disease has continued. An improved technic of sputum examination for acid-fast bacilli using tergitol has been reported. The use of this is said to approximate the results obtained by the use of guinea-pig

IV. The subject must now be examined from the viewpoint of the general public. Perhaps enough has already been said of the immense advantage such nursing service would be in the homes of the great bulk of our population where the family is overburdened by the sickness or other incapacity of its members. In such cases the help given by attendants resembles that formerly given by kindly neighbors. But it is better than that was; for the training the attendants have received enables them to render intelligent assistance in bringing into effect the vastly improved medical practice of today. Furthermore, this comparatively new movement offers desirable employment to the great majority of women who, while strongly inclined towards nursing service, have not had the advantage of the high education now required for the State registration of nurses. It would also offer opportunity for valuable service to the large number of women who for one reason or another have failed either to complete their course of training in the regular schools or to pass the State examinations for registration.

Perhaps it is too much to hope that America will ever adopt the far wiser plan of the White Cross of Holland whereby graded certificates are given to nurses in accordance with the amount of education and training they have had and the examinations they pass. This offers a ladder upon which they can climb by taking successive courses of training, and at the same time it utilizes the potential power for valuable service which in our American system is scrapped.

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inoculation, which is impractical except in selected cases because of cost.—S. A. PETROFF and P. SCHAIN, *Quar. Bull. of Sea View Hosp.*, Jan., 1940.

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There is no such thing as Mexican, White or Negro tuberculosis. The infection is passed from one race to another. No matter what his race, a person with tuberculosis is, first of all a human being, and, next a potential spreader of the trouble to others in the community.—*Health Crusader*, Apr., 1940.



## *Geriatrics in Country Practice*

By A. J. FULLER, M. D., Pemaquid, Maine

We are entering, or, may I say, have entered, an era in treating old people in the country which is disturbing—even alarming.

Only a short time ago the children either lived with, or took care of, the old people, but under the present arrangement, as soon as the parents become eligible (those who have no means of their own) for old age assistance, the children at once desert them. This means that an old couple, both of whom are probably over 65, are left to run their own house and live as best they may with the help of whatever old age pension may be granted them.

In most cases, people in these circumstances have been unable for years to replace their furniture or stoves, and to make necessary repairs to the houses in which they live.

These old people in winter are usually, owing to their lessened ability to get around, completely confined to two or three rooms. Due to the cost of fuel and the inadequacy of their worn-out stoves, combined with their own enfeebled condition, in a large majority of cases, the rooms are not properly heated or ventilated; few of them have the bedrooms warm enough to lie down in comfort during the daytime; few of them have couches satisfactory for a restful nap, and so they usually sit around either with their feet in the oven or against the stove to keep comfortably warm.

Everyone knows that if the outside of the body is not properly warmed, enough extra heat has to be generated inside to at least partially balance the cold outside. Not being able to properly rest lying down also means an increase of energy used.

These two factors are added to the most common one, that of improper diet. This may be caused either by inability to obtain the proper things, or the feebleness of the old couple, who, because of their weakness, either cannot or do not cook as well as formerly. Therefore, they buy more and more prepared foods, practically all carbohydrates, from the

ever-present baker's cart, and while realizing the unsuitability, still they have not ambition or strength enough to remedy it.

Owing to the cost, proteins are in many cases practically eliminated from the diet except such as are in some of the vegetables they eat. The total calories are cut down and the vitamins lowered below minimum requirements.

Eye lesions, general weakness, and dermatitis follow lack of Vitamin A. Loss of appetite and intestinal tone from deficiency of Vitamin B, together with a probable influence on nerve irritations and cardiovascular disturbances.

Everyone is familiar with the symptoms of extreme Vitamin C lack, but many older people have a great variety of conditions readily cleared up by sufficient amounts of this vitamin. Many of the sore tongues, swollen joints, and much of the easy bruising disappears. An increase in Vitamin D may retard arthritis. Whatever the condition, it all boils down to improper diet.

The high cost and scarcity of labor precludes the hiring of suitable help, and they get along as best they may.

We are, through modern medicine, able to bring many more people to this age than formerly, but few are really well or happy.

### SUMMARY

Owing to the changes in our family life in the country, more old people are living alone (with no young people) than formerly. The lack of, and high cost of labor inhibits its use for people unable to care properly for themselves, and lowered living conditions are the rule. More Vitamin Deficiency and Circulatory Disturbances are the direct result. What can we do about it?

P. S. It was recently suggested the State furnish iron and accessory Vitamins to these people during the winter months.

## *The National Physicians' Committee: An Open Letter to the Members of the Maine Medical Association*

The American Medical Association or any of its component parts, State or County, is, under the present decision of the Department of Internal Revenue, a scientific organization and, under such a classification, is exempt from the rulings of the Social Security Act. For the benefit of those who are not acquainted with certain rules, it can be stated that no organization, a substantial part of whose revenue is devoted to propaganda or the influencing of legislation, can qualify under the classification as a scientific group, nor if it engages in such activities can it retain such a status. The Collector of Internal Revenue is given the power to decide—subject to review by the courts—what constitutes a substantial part of the revenue of any association or society.

Since this ruling is a fact and is in force, and it must be manifest that any medical association or society should above all preserve its status as a scientific organization, there was founded the National Physicians' Committee for the Extension of Medical Service. The organization is exactly what it says it is. A non-political, non-profit and non-partisan organization that will by any and all legitimate means present to the people of the United States facts, based on competent evidence, to show that certain statements that have been made in an attempt to discredit the profession of medicine and medical practitioners as a whole are without truth and foundation. Its personnel is composed of men prominent in the American Medical Association, their State Associations and the special society groups of a private but recognized type. Above all, most of them are practitioners of medicine.

A well-known member of the Maine Medical Association in a discussion of "the reasons why" of the National Committee, said that he, like some others, felt before he heard the talk that it might be just another committee to create jobs, but that he was now able to state that he was glad to sponsor the work the committee proposed to do. Quoting from an address given before the Alumni Association of Jefferson Medical College by Mr. J. Howard Pew, Member of the Board of Trustees, the July 6th issue of the *Journal of the A. M. A.* prints in a few words some salient truths that should appeal to even those with leanings away from the methods that have made this country WHAT it is. "I appeal to you men of the medical profession to come to the defense of our American system of free enterprise and equal opportunity, for the truth is that no economic planning authority could possibly have foreseen, plotted and organized such an amazing spectacle of scientific, MEDICAL and industrial progress as the world has witnessed right here in America during this last century. No trust or combination, private or governmental, could have accomplished it. It could have been achieved only under conditions where there was a wide-open opportunity for all the genius, inventive ability, organizing capacity and managerial skill of a great people."

The critics of medicine, the critics of the American way of life, are becoming more expressive in voice, print and action. Regiment medicine, regiment any business or profession and the foundation is laid for the regimentation of every human being in this country. If any one is in doubt as to what that sort of thing means it would seem that examples in Europe furnish abundant room for thought. One of the objectives of the committee is that American Medicine be allowed to go on in the future as it has in the past: THE MASTER OF ITS OWN HOUSE. As a member of the central committee for Maine I urge that financial contributions be made individually as each judges he or she can do. The address of the Committee is the Pittsfield Building, Chicago, Illinois. Checks should be made payable to N. S. Davis, III, Treasurer.

Signed: F. H. JACKSON, M. D.,  
Houlton, Maine.



## Editorials

### *The Value of Conferences and Symposiums*

Omitting extended comment on the general excellence of the program provided at the session held at Rangeley Lakes it seemed to be the universal opinion that symposiums and conferences have a most valuable and definite part in bringing to the profession facts of extreme importance in our daily work. The Town Hall type of conference without question affords an opportunity for a much better presentation and discussion by speakers and audience than can possibly obtain in the larger meetings with their more formal papers and necessary limitation of time. The merits and demerits of the precocious twins of modern medicine, endocrine and chemotherapy, can easily occupy the entire program of a county society. Valuable as they are to every practitioner the paint has been a bit green on some of the clinical masterpieces exhibited to the profession by some whose enthusiasm has not been tempered by time and established facts.

Conferences allow for a free exchange of opinion by practitioners who are engaged in the daily practice of medicine, such comprise the majority membership in most state associations, and to many whose opportunities are more limited than others such meetings are most valuable. Any and all methods that lessen the dangers and increase the safety of surgical procedures; obstetric and fracture problems; conferences of a question and answer type on subjects of daily happenings in the work of all are of more than academic interest and furnish opportunities not only for the continuance of graduate education but what may be sometimes considered as re-education. Programs providing instruction along practical and every day lines should be the objective of those who arrange for our county and state association meetings.

Recognizing the impossibility of being in two places at once, this obtains more at our State than County meetings, interested physicians often find symposiums scheduled for

the same hour that they would like very much to attend and participate in. It is impossible to suggest a way out for that sort of situation but if it could be arranged so that the JOURNAL could print the essential clinical facts of great value and a resume of the discussions brought out in these smaller meetings we could have for reference and study the experiences of men decidedly worth while. Perhaps it might be arranged that certain symposiums of interest to the majority could be presented so as to be more available. The idea is suggested that a symposium on diseases of the gall bladder and ducts, involving as it does, the correlated efforts of internists, surgeons, roentgenologists and pathologists, could very well employ a full morning or afternoon session; fractures and the employment of modern fracture apparatus clinically demonstrated is another suggestion and undoubtedly the scientific committee would welcome requests and suggestions from members on other topics.

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### *The President-Elect of the American Medical Association*

In these troubled times and most distressing conditions there must result a certain feeling of security when men of ability, judgment and common sense are appointed to positions demanding such qualifications. The American Medical Association for many years has been most fortunate in that it has elected to official positions men whose experience and proven worth warranted our confidence. Their tasks have been burdensome, much has been expected and required of them and they have well fulfilled positions demanding much sacrifice.

The medical profession of New England is proud of the high honor accorded Dr. Lahey. As a surgeon, teacher and loyal member of his profession his record stands unquestioned. Better than that, in some ways, he brings to his office a much needed keen

understanding of the many problems that today vex and perplex not only the profession of medicine but the public it serves. That these problems must be solved no one questions; but they must be solved by those with practical experience in the practice of medicine. Those with axes to grind, the radicals in and out of the profession and those whose motives are open to doubt and serious question have added nothing but confusion to

a situation demanding clear heads, clear thinking with more light and less heat. The profession knows full well that the high position of leadership given to Dr. Lahey will be filled with credit and distinction; the public can be assured that a physician sympathetic with their problems and worthy of the utmost confidence and trust has been nominated to one of the highest honors his profession can bestow.

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## *Quarterly Journal of Studies on Alcohol*

With the discontinuance of the *British Journal of Inebriety*, the *Quarterly Journal of Studies on Alcohol*, published by The Journal of Studies on Alcohol, Inc., New Haven, becomes the only scientific publication in the English language devoted to the problems of alcohol. That alcohol is a public health problem of great importance hardly needs mentioning. The American Association for the Advancement of Science recently formed a Research Council on Problems of Alcohol and has chosen the *Journal* as its official organ.

Under the editorship of Howard W. Haggard, M. D., of Yale University, the *Journal* can be depended on to collect and present valid information concerning the problems of alcohol and alcoholism. Vol. I, No. 1, has a most interesting and valuable medico-legal review on the admissibility of chemical evidence on the issue of intoxication under the motor vehicle laws. Comment on the Maine statute would indicate that it is somewhat ambiguous in that it does not refer to any kind of permissible tests. In view of the rapid development of the breath and urine tests, the results of which normally express the alcoholic contents of the blood, the Maine statute, while it may be construed to permit such usage, does not in the opinion of the reviewer contemplate it and he goes further when he says that future statutes should go beyond the one in Maine and particularize the kind of test which may be used to measure the alcohol content of the defendant's blood. This review is recommended to prosecuting officers, medical examiners

and pathologists whose duties bring them in contact with the criminal courts since prosecutions for driving under the influence of alcohol are becoming more numerous. It is earnestly recommended that the coming Legislature appoint a committee to meet with competent workers on this important subject that we may have a statute in Maine that will safeguard the interests of the State and set out in definite and clear terms the procedures recognized and that must be followed.

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## *Austin Albert Hayden, 1881-1940*

Organized medicine has indeed lost a loyal friend in the death of Doctor Hayden. Secretary of the Board of Trustees of the American Medical Association, distinguished worker in the field of ophthalmology and otolaryngology, he was above all a friend of the general practitioner. His record as a leader in medical advancement can well serve as an example to all and it certainly seemed that no task was placed on his shoulders that was not accepted willingly and carried out. A most genial and kind man, he could and did fight to the utmost of his ability for the preservation of the right of medicine to be a free and independent profession. His counsel on perplexing and matters of interest to the rank and file of his colleagues was often sought and never in vain. He thought well and fairly and he gave utterance to his conclusions in language easily understood. If he had a motto it might have been: "What can I do for the common good." He did a great deal and he did it well. A wonderful friend has gone and he will be greatly missed.



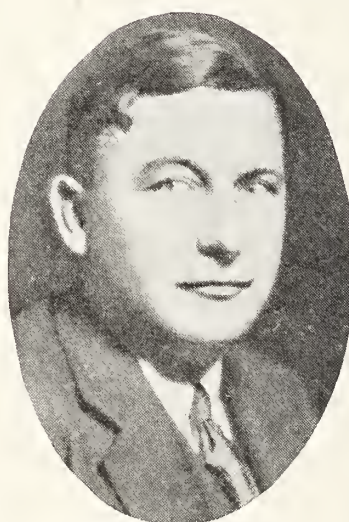
## COUNCIL MAINE MEDICAL ASSOCIATION, 1940-41



G. H. Stevens  
*Chairman*



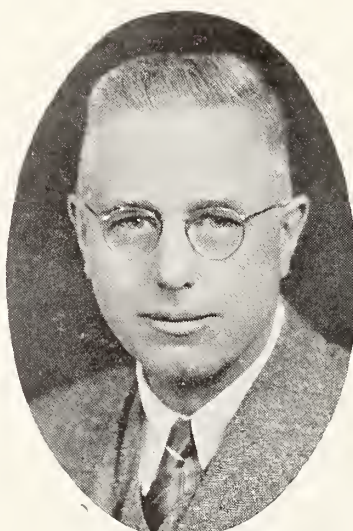
Wm. A. Ellingwood



Stephen A. Gobb



E. M. McGarty



N. H. Nickerson



O. F. Larson

## Necrologies

### *Guy L. Burritt, M. D., 1868-1940*

Doctor Guy L. Burritt, 71, practicing physician in the town of Harrington, Maine, for 36 years, passed away April 30, 1940, following a brief illness. Doctor Burritt was born in Hinesburg, Vermont, September 15, 1868, attended the University of Vermont and was graduated from the University of Baltimore in 1901. He practiced in Westford, Vermont, then moved to Harrington, Maine, where he practiced continuously up to the time of his death. In 1906 he married Mabelle R. Grace, who survives him, other survivors are a daughter Vena Plummer of Bangor, Maine, and a son Landon of Chicago, Illinois, both by a former marriage.

For several years he served as a member of the School Board. He was a member of the Masonic Lodge and Anah Temple, a member of the American Legion, and the Maine Medical Association. He served as 1st Lieutenant in the World War, later gaining the rank of Captain.

The funeral services were held May 2, 1940, at his late residence in Harrington, and were very largely attended. There was a beautiful display of flowers, mute evidence of the high esteem in which he was held.

Th honorary bearers were Silas Gibson, E. M. Frye, Melville Drisko and Harley Worcester. Active bearers were Harry Rand, Harry Stevens, Horace Kennedy and Wilbur Robinson, all members of the American Legion of which Doctor Burritt was a member and Commander.

Doctor Burritt will be remembered as a staunch friend and a most highly esteemed citizen of Harrington, and his death will be mourned by the entire community.

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### *Edward C. Cook, M. D., 1869-1940*

Doctor Edward C. Cook died at his home in York Village, July 9, after an illness of several months. No one person's death in a community could have caused a deeper sense of personal loss; it would be hard to find in the town a home where, during his long years, he had not at some time given help and comfort.

The only son of the late Edward Hansen and Annie Hamblin Cook, he was born in Vassalboro, Maine, on August 30, 1869. Of Quaker parentage, he thus automatically became a birthright member of the Vassalboro Quaker meeting.

He was a graduate of the Quaker School, Oak Grove, at Vassalboro. After graduating from Bowdoin Medical School, Doctor Cook began his practice in York Village.

In November, 1895, Doctor Cook was married to Sally Moody of York.

Doctor Cook was interested in everything having to do with the town he grew to love so well; he was Past Master of St. Aspinquid Lodge, a Past Patron of the Eastern Star; a member of the First Parish Church of York Village, he had long been an assessor of the Parish; he served the town faithfully and well many years ago as superintendent of schools; he was a member of the Old York Historical and Improvement Society. Doctor Cook served as President of the York County Medical Association and Vice-President of the Maine Medical Association, and was a member of the American Medical Association.

Doctor Cook was largely responsible for the establishment of York Hospital. He had become widely known for his success in Obstetrics; during his forty-five years of practice he had delivered nearly fifteen hundred babies and his patients came to him from many parts of the country.

Every few years it had been his custom to go to Boston for courses on obstetrics at Harvard Medical School and Massachusetts General Hospital.

Besides his widow, Doctor Cook is survived by one son, Edward M. Cook, M. D., of York Harbor, Maine, and one grandson, Edward M. Cook, Jr. There are two sisters, Mrs. Harriet Fernald and Mrs. Annie Starkey, both of Falmouth, Maine.

Funeral services were held July 14, at the First Parish Church at York Village, Maine, with the largest attendance ever present at a funeral in that church.

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### *Louis A. Derry, M. D., 1880-1940*

Doctor Louis A. Derry, 60, died at his home in Portland, Maine, June 17, 1940, following several months of failing health. He had been a practicing physician in Portland for 33 years.



Doctor Derry was born in Portland, Maine, February 10, 1880, son of Adolphus and Catherine Dolan Derry, and was graduated from Holy Cross College in 1902 and from the Bowdoin Medical School in 1906. After serving his internship in the Boston City Hospital he started his practice in Portland in 1907.

A general family practitioner, he had since 1933 been president of the medical staff of Queen's Hospital and had served for some time as director of the Hospital.

From 1910 until the school was discontinued Doctor Derry was instructor in materia medica, pharmacology and therapeutics at Bowdoin Medical School. He married Miss Edith M. Hall, July 1, 1904, who survives him.

Doctor Derry was a member of Portland Council, K. of C., Portland Lodge of Elks, the Cumberland County Medical Society, Maine Medical Association, American Medical Association, and the American College of Surgeons.

Besides his widow, he leaves a son, Richard H., and a sister, Mrs. Henry Cleaves Sullivan, both of this city, and a brother, Doctor George Herman Derry of Detroit, Michigan.

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### *Willis F. Hart, M. D., 1859-1940*

Doctor Willis F. Hart, 81, died at his home in Camden, Maine, June 25, 1940. He had practiced medicine in Camden for 49 years, moving there from Exeter where five years earlier he had started his career as a doctor. Doctor Hart, a Past-President of the Maine Medical Association, received the Association's gold medal in recognition of fifty years in the practice of medicine in 1936.

He was born in Holden, Maine, the son of Fran-

cis King and Sylvania B. Goodwin Hart, and attended the schools of that town. He was graduated from the Maine Central Institute in 1882 and from Bowdoin Medical School in 1886.

He was a member of the Maine Medical Association, the American Medical Association, Amity Lodge and Keystone Chapter of Masons. He took an active interest in the affairs of the town and previous to his resignation last spring was president of the Home for Aged Women for eleven years.

He leaves besides his widow, who was formerly Mary A. Gilmore of Dedham, two sons, Fred W. Hart of Wilmington, Delaware, and Frank M. Hart of Ridley Park, Pennsylvania, three grandchildren; a sister, Miss Clara B. Hart, and a brother H. M. Hart, both of Bangor.

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### *George Hayward Coburn, 1855-1940*

Doctor Coburn, 85, died Tuesday, June 18, 1940, at Rangeley following several years of poor health.

He was born March 10, 1855, in Ripples, N. B., and was a graduate of the University of Pennsylvania Medical School in 1875. He came from Chicago to Rangeley in 1920 and carried on active practice there until about two years ago with the exception of several winters spent in Philadelphia.

Doctor Coburn was a member of the Franklin County Medical Society and an Honorary Member of the Maine Medical Association, having been presented with the Association's gold medal in recognition of fifty years in the practice of medicine in 1931.

He is survived by three sons and two daughters.

Funeral services were held at the Baptist Church in Rangeley on Thursday, June 20, 1940.



## News and Notes

### Joint Meeting

*Aroostook, Kennebec, Penobscot, Piscataquis, and Somerset County Medical Societies*

Seventy-eight members and guests were present at a joint meeting of the Aroostook, Kennebec, Penobscot, Piscataquis, and Somerset County Medical Societies, held Thursday, July 25th, at Squaw Mountain Inn, Greenville. Some members from each Society were present.

Harvey C. Bundy, President of the Piscataquis County Medical Society, presided at the dinner. Thomas A. Foster of Portland, President of the Maine Medical Association, Carl H. Stevens of Belfast, Chairman of the Council, Frederick R. Carter of Augusta, Secretary-Treasurer, and Joseph A. Pratt of the Pratt Diagnostic Clinic of Boston, spoke briefly before the meeting was adjourned to the Pine Room for the Scientific Program.

John Homans of Boston spoke on *Head Injuries, Acute Intestinal Obstruction, Peripheral Arterial Gangrene, and Empyema*, at the Surgical Panel Discussion conducted by Harrison L. Robinson of Bangor. W. B. S. Thomas of Dover-Foxcroft spoke on *The Cause of Some Diseases of Unknown Etiology*. Discussion led by John B. Thompson of Bangor and Fred J. Pritham of Greenville Junction was participated in by many of the members and guests present.

NORMAN H. NICKERSON, *Secretary,*  
*Piscataquis County Medical Society.*

### Change of Address

#### *Piscataquis*

John B. Curtis, M. D., from Brownville Junction, Me., to 10 High Street, Milo, Me.

#### *Sagadahoc*

A. F. Williams, M. D., from 14 Sewall Street, Augusta, Me., to Phippsburg, Me.

### New Member

#### *Hancock*

Hyman Millstein, M. D., Southwest Harbor, Me.

#### *Charles B. Sylvester, M. D., Heads Maine Public Health Association*

Doctor Charles B. Sylvester of Portland, Past President and Honorary Member of the Maine Medical Association, was elected President of the Maine Public Health Association at its 29th annual meeting held July 11th at the Atlantic Hotel, Kennebunk.

### *The Ralph D. Simons Memorial Clinic*

The Ralph D. Simons Memorial Clinic, a medical and surgical clinic, formed by a group of doctors from Gardiner and Richmond, was opened in Gardiner during the week of July 6th.

Named after the late Doctor Ralph D. Simons, a practicing physician in Gardiner for twenty-five years, the clinic has been organized with the purpose to improve service to the public by pooling the equipment and experience of the group of physicians.

The new clinic has arranged to work in coöperation with the Gardiner General Hospital and will have access to all of the hospital's laboratory facilities.

Doctors affiliated with the clinic are C. G. Farrell, M. D.; Frank B. Bull, M. D.; Allen C. Hurd, M. D.; and Henry Almond, M. D.; all of Gardiner; and Merrill E. Joss, M. D., of Richmond. Miss Audrey Plaisted, who recently resigned from the teaching staff at Gardiner High School, is business manager.

### *Medical Preparedness*

The Officers of the State Association are glad to announce that Doctor John G. Towne of Waterville has accepted appointment as State representative of the Committee on Medical Preparedness of the American Medical Association. The Committee urges individual members of the Association to fill out the questionnaires recently received and return them at the earliest possible time.

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## Notices

### Annual Meeting of the Maine Medico-Legal Society

The annual meeting of the Maine Medico-Legal Society was held at Rangeley on June 25, 1940, with the President, Walter S. Stinchfield, presiding.

The reports of the Secretary, Treasurer, and Executive Committee were read and accepted.

Attorney General Franz U. Burkett spoke on the new law, and there was a general discussion.

It was voted to authorize the Executive Committee and the Attorney General to make recommendations to the next Governor on the appointment of Medical Examiners.

Dr. Timothy Leary of Boston was present and took part in the discussions.

Dr. H. L. Dobson of Presque Isle was elected to membership.

An interesting case was discussed by the Medical Examiner, County Attorney, and Pathologists concerned.

The following officers were elected for the coming year:

President—Franz U. Burkett, Portland.

Vice-President—William Holt, Portland.

Secretary—G. L. Pratt, Farmington.

Treasurer—W. S. Stinchfield, Skowhegan.

GEORGE L. PRATT, *Secretary*.

### Navy Medical Corps

Doctors are urgently needed for the United States Navy to bring its permanent Medical Corps to full, peace time strength.

Examinations for appointments as commissioned officers in the Medical Corps are to be held on August 19, 1940, at the Naval Hospital, Chelsea, and various other Naval Hospitals throughout the country.

Applicants for appointment must be male graduates of a Class "A" medical school; have completed an internship in a recognized hospital; be less than 32 years of age at the time they receive their commissions; be citizens of the United States, and be physically and professionally qualified.

Professional qualifications must be demonstrated by competitive written, oral and practical examinations embracing the subjects of (1) General Medicine, (2) General Surgery, (3) Obstetrics and Gynecology and (4) Preventive Medicine and Medical Jurisprudence.

The pay and allowances for the newly appointed Medical Officer is \$2,699 per year if he has no dependents, and \$3,158 per year if he has dependents.

Additional information may be obtained by addressing a letter to the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

James M. Parker—Continued from page 217

of valvular incompetence by ligation at definable critical points. Injection of sclerosing solutions must be considered as a merely supplementary measure.

If varicose veins are treated early they need not go on to the complications of ulceration and hemorrhage.

### BIBLIOGRAPHY

1. Brodie, Sir Benjamin C.: Lectures Illustrative of Various Subjects in Pathology and Surgery, Longman, Brown, Green & Longman, London, 7:157, 1846.
2. Mahorner, H. R., and Ochsner, A.: Modern Treatment of Varicose Veins As Indicated by the Imparative Tourniquet Test. *Annals of Surgery*, 107:927, June, 1938.
3. Homans, John: Operative Treatment of Varicose Veins and Ulcers, Based Upon a Classification of These Lesions. *Surgery, Gynecology and Obstetrics*, 22:143, 1916.
4. Faxon, H. H.: The Treatment of Varicosities; Pulmonary High Ligation of the Internal Saphenous Vein with the Injection of Sclerosing Solutions. *Arch. Surgery*, 29:794, Nov., 1934.
5. Edward, E. A.: The Treatment of Varicose Veins; Anatomical Factors of Ligation of the Great Saphenous Vein. *Surgery, Gynecology and Obstetrics*, 59:916, Dec., 1934.
6. Linton, R. R.: Communicating Veins of the Lower Leg and an Aquative Technique for Their Ligation. *Annals of Surgery*, 107:582, April, 1938.
7. Freeman, N. E.: Physiological Principles in the Treatment of Varicose Veins. *Surg. Clin. North America*, 1525, Dec., 1939.
8. Adams, J. C.: Etiological Factors in Varicose Veins of the Lower Extremities. *Surgery, Gynecology and Obstetrics*, 69:717, Dec., 1939.
9. Howard, Jackson, C. R., and Mahon, E. J.: Recurrence of Varicose Veins Following Injection. *Arch. Surgery*, 22:353, 1931.
10. Mahorner, H. R., and Ochsner, A.: A New Test for Evaluating Circulation in the Venous System of the Lower Extremity Affected by Varicosities. *Arch. Surgery*, 33:479, 1936.
11. Ochsner, A., and Mahorner, H. R.: Varicose Veins: C. V. Mosby Co., St. Louis, 1939.
12. Linton, R. R.: Post-phlebitic Varicose Ulcer. *New England Journal Medicine*, 219:367, Sept. 15, 1938.
13. Edward, E. A., and Edward, J. E.: The Effect of Thrombophlebitis on the Venous Valve. *Surgery, Gynecology and Obstetrics*, 65:31, Sept., 1937.
14. Faxon, H. H., and Barrow, D. W.: End Results of High Ligation and Injection in the Treatment of Varicose Veins. *Surgery*, 3:518, 1938.

## Book Reviews

### *"The Management of Obstetric Difficulties"*

By: Paul Titus, M. D., Obstetrician and Gynecologist of The St. Margaret Memorial Hospital, Pittsburgh; Consulting Obstetrician and Gynecologist to the Pittsburgh City Homes and Hospital, Mayview, and to The Homestead Hospital, Homestead, Pa.; Secretary of The American Board of Obstetrics and Gynecology.

With 368 Illustrations and 5 Color Plates.  
Second Edition.

Published by The C. V. Mosby Company, St. Louis, Mo., 1940. Price, \$10.00.

The author feels that enough new material has been accumulated within the past three or four years on the relief of sterility, sulphanilamide therapy, X-ray pelvimetry, management of pregnancy and obstetrics that a new edition of his well received book has become a necessity. Seventy-five new illustrations and eighty-eight pages have been added.

Now as ever before, Dr. Titus wishes to impress the medical profession with the seriousness of the duties of the obstetrics-practicing general practitioner toward the mother, the child, and the medical profession. He believes that mortality of mother or child, accidents of various types, infection and post-partum complications could be greatly reduced if every hospital would enforce the rules which are posted in the scrub room adjoining the delivery room of the hospital in which he is practicing. The sign reads: "All physicians attending obstetric patients in this Hospital shall be required to call a consultant either from the official obstetric staff of this Hospital, or that of another approved hospital, in all instances of ante-partum hemorrhage, of toxemia, and of prolonged labor (longer than 24 hours) or delayed delivery, and before they may undertake in this hospital any obstetric operation of greater extent than low forceps delivery. These consultations are made without fee unless the patient's own physician requests that a charge be made. Interns are not permitted to undertake any obstetric operations except when a member of the official staff of this Hospital is in direct attendance and present."

In addition he urges that "the profession should continue to encourage every effort which tends to impress women of all classes with the importance and necessity of good prenatal care, and skilled, conservative medical attention during labor, delivery, and the puerperium."

The sole purpose of this book is to offer expert advice for expert service in the management of obstetric difficulties. The response of the profession to the former edition promises equally gratifying reception of the revised new edition.

### *"Cancer in Childhood and a Discussion of Certain Benign Tumors"*

Edited by Harold W. Dargeon, M. D., F. A. A. P., Attending Pediatrician, Memorial Hospital for Cancer and Allied Diseases, New York; Associate Pediatrician, St. Luke's Hospital, New York; Associate Pediatrician, New

York Foundling Hospital; Instructor in Pediatrics, College of Physicians and Surgeons, Columbia University.

Illustrated.

Published by The C. V. Mosby Company, St. Louis, 1940. Price, \$3.00.

The editor, in collaboration with ten co-authors presents here a series of articles, primarily for the purpose of emphasizing the fact that cancer in childhood is one of the important children's diseases. The information contained in this symposium has been collected from a comparatively large group of children housed in a hospital entirely devoted to the study and treatment of tumors by members of the various departments of the Memorial Hospital for Cancer and Allied Diseases in New York. The small work represents a valuable contribution to the cancer problem and its literature.

### *"Diseases of the Gallbladder and Bile Ducts"*

By: Waltman Walters, B. S., M. D., M. S. in Surgery, Sc. D., F. A. C. S., Head of Section in Division of Surgery, The Mayo Clinic; Professor of Surgery, The Mayo Foundation (University of Minnesota);

and Albert M. Snell, B. S., M. D., M. S. in Medicine, F. A. C. P., Head of Section in Division of Medicine, The Mayo Clinic; Professor of Medicine, The Mayo Foundation (University of Minnesota),

with 342 illustrations on 195 figures.

Published by W. B. Saunders Company, Philadelphia and London, 1940. Price, \$10.00.

This book, the work of the combined efforts of the authors, in collaboration with eight other contributors, is dedicated to the genius of the late Doctors W. J. Mayo and C. H. Mayo, and the staff of the Mayo Clinic. In it the authors have tried to present informative material directly or indirectly concerned with pathologic alterations in the gall bladder and bile ducts, which is capable of direct practicable applicability. They kept in mind that the practicing physician is interested primarily in the latest available practicable knowledge and only secondarily in the theoretical background of the same, even though he is always fully aware that both theoretical and practical knowledge as well as technical skill are necessary for better understanding of the subject material under consideration.

The work is composed of five parts. In Part I, anatomy, physiology and pathology of the gall bladder and bile ducts are considered. Part II deals with the diseases of the gall bladder. Part III describes the diseases of the bile ducts. Part IV shows the most appropriate medical and surgical treatment. Part V is composed of chapters dealing with pre-operative and post-operative care. There is an appendix in which the technical set-up of the operating room is given in detail.

The authors call attention to the unfortunate tendency that has developed among some physi-



cians of attempting medical treatment in frankly surgical conditions. They prove by satisfactory argument, based on experience, that, even in cases where roentgenologic examination is doubtful or negative, timely appropriate surgical intervention coupled with skillfully executed surgical technique almost invariably brings relief from pain for the patients, especially in those suffering with cholecystic disease.

### *"Minor Surgery"*

By: Frederick Christopher, S. B., M. D., F. A. C. S., Associate Professor of Surgery at the Northwestern University Medical School, Chicago. Chief Surgeon at the Evanston (Ill.) Hospital,

with a Foreword by Allen B. Kanavel, M. D., F. A. C. S.

Fourth Edition, Reset  
with 639 Illustrations.

Published by W. B. Saunders Company, Philadelphia and London, 1940. Price, \$10.00.

The concept "Minor Surgery" can be explained and elucidated only with difficulty, yet every graduate of medicine feels reasonably certain what it includes. By far the largest amount of the average general practitioner's surgery is of minor magnitude technically, yet highly important in the patient's life because most of his injuries, wounds and infections are of a minor nature but very painful and require quick appropriate medical and surgical attention. The author of "Minor Surgery" has created a highly useful book, filled with sound

advice for the care in a great variety of afflictions. In the present edition much new material appears for the first time in book form. Old material has been replaced by new. Simple methods of treatment are emphasized because they were found to be superior to complicated chemical formulas or mechanical devices. Many sections have been largely rewritten, such as the ones which deal with methods of treatment of varicose veins, thrombophlebitis, head injuries, low back pain, acute osteomyelitis, chondroma, and of blood grouping, blood-transfusion, Wangensteen suction in dilation of the stomach and intestine. With Dr. Christopher "Minor Surgery" assumes major importance in the professional success of the practicing physician.

### *"The March of Medicine"*

Edited by the Committee on Lectures to the Laity of the New York Academy of Medicine.

Published by Columbia University Press, New York; Morningside Heights, 1940. Price, \$2.00.

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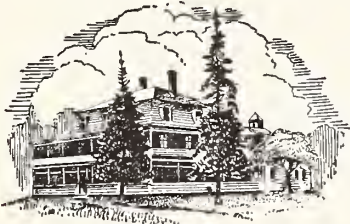
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# The Journal of the Maine Medical Association

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## *Psychotherapy in General Medical Practice\**

By M. RALPH KAUFMAN, M. D., Boston, Massachusetts

The practice of medicine, genealogically speaking, is more or less directly descended from individuals who primarily practiced psychotherapy, whether they recognized it as such or not. The medicine man, the shaman, the Priest of Kos, who treated illness according to their own well-established formulæ by prayer, abjuration, or driving out the demon, fundamentally maintained the view that sickness was not due solely to physical causes, in the same sense in which we do today. What could be removed by prayer could be caused by sin. In other words, certain methods based on psychic factors were of paramount importance in the early practice of medicine; and a trephined skull may be as much evidence of a theory of medicine which treated illness by making a "hole in the head" to allow for the escape of a demon, as of an effort to cause a decrease in intracranial pressure.

To the medical man in general practice, many of his patients present problems which are easily recognized as being psychogenetically determined, even though many of them

seem on the surface to have only a somatic etiology. It is perhaps due to a certain type of emphasis in medical education that we tend to consider the test-tube, the stethoscope and laboratory more scientific than what the patient tells us, how he tells it, and what type of problem he presents. The patient's statement of his complaints, how he verbalizes them, what emotional reaction he shows to them, are data exactly as scientific as the tales which we hear in the apex.

Most of you would readily agree that for the most part your patients present problems to you that are not intrinsically bound up with the system in which the organic illness is lodged. Recent medical tradition has unfortunately tended to emphasize the system as a unit and to look upon the patient as the carrier of the system, rather than to deal with the individual as a total organism. Certain types of illness are reacted to by the majority of people not only in terms of the organic pathology involved, but also in terms of the cultural evaluation of, or taboos surrounding the particular illness. An excellent

\* Presented at the Nervous and Mental Disease Conference at the 88th Annual Session of the Maine Medical Association at Rangeley Lakes, Maine, June 25, 1940.



example of this is syphilis. To the medical man in the laboratory, syphilis is a disease caused by the spirochete, in the same way as pneumonia is caused by the pneumococcus, or a cold by some as yet unknown virus. However, psychologically, the patient with syphilis reacts as a rule quite differently from a patient with a cold or pneumonia. It is what might be called a "stigmata" illness, around which center certain moral and cultural taboos, and therefore an illness to which a patient may react with anxiety and guilt. The treatment of the luetic therefore becomes not only a problem in the proper exhibition of anti-luetic drugs, but also a problem in interpersonal relationships between the physician and patient, the lessening of guilt, the attempt to have the patient accept the illness without adding to his difficulty by moral judgment.

In recent years, particularly under the stimulus of the psychoanalytic school of Sigmund Freud, a great deal of understanding has been gained of the dynamics and significance of the neurotic reaction. The insight attained in this way has been of tremendous value in the whole field of medicine. It has become recognized that the neurotic reaction is not something haphazard, irrational, or of no significance, but that it is intimately tied up with the personality structure of the individual. It has been demonstrated that mental functioning and human motivation are not all on the conscious level; that many of our emotional problems and our conflicts take place within us at a level below consciousness. In addition, it has been shown that neurotic symptoms are an attempt on the part of the individual to solve conflict situations that arise within him. The components of these conflicts are partly inner instinctive wishes and drives, and partly cultural and environmental stresses and strains. Since a neurosis is a compromise formation, it contains the elements of all these forces. In other words, a neurotic symptom has a very definite significance in the life of the patient. It has a meaning and a purpose. The physician has become aware that, in order to understand neurotic manifestations, he must understand the life history of the individual with whom he is dealing.

Cannon and his co-workers have definitely demonstrated that physiological function is intimately interrelated with the emotional life of the individual. Blushing, a peripheral dilatation of the blood vessels, is an excellent example of the influence of the psyche on the soma. Different people will blush for different reasons, the middle-aged spinster for one, and the physician for another. The stimulus, however, is always psychological. The effect of psychological stimuli on the gastro-intestinal tract and many of our other physiological systems is well known to all here. I labor this point somewhat because many patients will only come to a physician if their complaints are within the physical sphere, whether it be hyperacidity, a choking sensation, or diarrhea.

A usual routine is to examine the patient physically and after a thorough examination, if no organic pathology is discoverable, to tell the patient that there is nothing wrong with him and that his illness is imagined. After two or three such experiences, the patient may end up with a cultist or Christian Scientist, who, although his theoretical conceptions are wrong, will agree with the patient that there is something definitely wrong with him, and treat him according to these theories. A diagnosis of psychoneurosis should not under ordinary circumstances be made only by exclusion. The mere absence of organic disease may be an indication, but not a proof that the individual is suffering from psychoneurosis. The criteria for diagnosis of a psychoneurosis should be as definite as those for the diagnosis of any other illness. The patient's complaints, their setting and relationship to his personality, and the meaning of his complaints and the solution of his conflicts must be taken into consideration.

There are certain common types of neuroses that one meets with in practice. These are obsessional neuroses, conversion hysterias, and various forms of so-called organ neuroses. All have definite diagnostic criteria. The latter two are of particular importance to the physician primarily because they usually evince themselves in somatic manifestations.

During the past few years, there has been an intensification of study and research in the field which has been called psychosomatic

medicine. This deals primarily with the functional interrelationship between psychological factors and physiological function. A number of basic principles have been established and it has been demonstrated that psychological factors play an important role in such syndromes as hypertension, gastrointestinal disease, some forms of the dermatites, and a number of other syndromes. This all leads to one point, namely the importance of understanding and being able to work with the patient's emotional reactions. Psychotherapy consists essentially in the use of psychological methods for the treatment of illness. There are various forms of psychotherapy.

A differentiation must be made at the outset between treatment which is directed against symptoms and treatment directed against etiology. Aspirin as an analgesic will stop the symptom of headache, but every medical man knows that the use of aspirin is only permissible when the etiology of a headache has been determined. Certainly a headache resulting from a brain tumor or skull fracture is to be treated differently from one resulting from a mild hangover.

Scientific psychotherapy must always bear this differentiation in mind and attempt wherever possible to work on the basis of etiological diagnostic criteria. The anxiety which a patient suffers may be determined by many factors. It may be the result of the guilt reaction in connection with the problem of masturbation; or a reaction to aggressive fantasies with the fear of retaliation; or may present itself as a symptom of a phobia, which is precipitated out only under the circumstances of the phobic situation, as in agoraphobia, where the anxiety appears only when the individual has to cross a street. In the obsessional neurotic, one sees anxiety when for any reason it is impossible to carry out the compulsive ritual. A psychotherapeutic procedure which does not take into consideration the dynamics of symptom formation is the equivalent of a shotgun prescription.

There are two main categories of psychotherapeutic procedures: one which aims at covering up or allaying anxiety, and one, more directly related to the so-called dynamic

approach, which is an uncovering procedure, where the essential attempt is to lay bare underlying conflicts and emotional situations associated with the symptom formation. Reassurance plays an important role in the therapy employed by most physicians. This consists essentially in the attempt on the part of the therapist to minimize the patient's feelings, usually practiced as an attempt at denial of the seriousness of the patient's illness.

All psychotherapeutic procedures are based fundamentally on the relationship between the patient and the physician. You as general practitioners know very well that the role played by the physician in his relationship to the patient and his family is much more than that of a doctor in the narrow sense, since the physician is a recipient of the patient's confidences, is made aware of his difficulties and conflicts, and generally plays the role of adviser and arbiter. It is important for the doctor to recognize that, in addition to the realistic role, he also stands in a symbolic relationship to the patient and the patient's family.

The findings of modern dynamic psychiatry have demonstrated that an individual's psychological reactions tend to run in patterns. It has been emphasized that the earliest experiences in infancy and childhood are determining factors for the formation of personality. The pattern of conflict solution during these early periods is maintained throughout life, and one sees a series of repetitive behavior tendencies. Emotional reactions to individuals who are important to the child, such as parents, teachers, nurses, siblings, tend to remain basic throughout life. Subsequently, these emotional feelings tend to be directed towards other individuals who in some way are reminiscent of the earlier figures. In this way, persons who in any way stand in an authoritative relationship to the individual may represent to him a father figure. During any prolonged therapeutic relationship between physician and patient, these patterns of behavior tend to reappear and the patient reacts to the physician not only in terms of the actual situation, but also according to these emotional needs. The significance of this knowledge cannot be over-



emphasized, since it is of fundamental importance in psychotherapy.

There are two aspects to all human emotional attitudes: a positive and a negative. Too often, the physician sees only the evidence of positive relationship, and accepts himself at the patient's over-evaluation. However, when evidences of negative feelings creep into the picture, the physician may begin to resent the patient's attitude, taking it as a personal affront because he does not realize that to a great extent such hostility may be merely the repetition of an early behavior pattern and in fact have little to do with the realities involved. The practicing physician should always bear this in mind, and realize that no psychotherapy can be effective unless the patient is given the opportunity to ventilate his emotional reactions. Based on the positive feeling, the need for love and sympathy, which the patient may feel, he will accept suggestions and reassurance, which add to his feeling of security and in this way he may lose the need for neurotic symptoms.

A great deal may be accomplished by sympathetic listening to the patient's story. It is a fairly common experience in psychiatric clinics in general hospitals, that a patient who is referred there will remark during the course of a first interview, after he has been given the opportunity to tell his difficulties without being confined to a series of questions and answers about his physical complaints, that, "You know, doctor, this is the first time I have really had a chance to tell anybody my story." In one highly specialized form of psychotherapy, that is psychoanalysis, this relationship, which is called transference, is utilized consciously as one of the most important elements in the therapeutic technique. It would lead us too far afield to discuss at this time the principles of psychoanalytic therapy. Nevertheless it should be stressed that, to a great extent, much of what we call psychotherapy stems from this school of thought.

In the simple neuroses, such as conversion hysterias, or mild anxieties, this "listening method" may be the most useful form of approach for the practitioner. It is important that the physician really remain neutral

and sympathetic. It is fatal to any therapy for the therapist to indulge in moral lecturing, authoritative disciplinary methods, to attempt to "bulldoze" the patient out of his illness, or to accuse him of malingering, or to tell him "there is nothing wrong with him," for after all, to the patient his neurotic suffering is real and not imaginary. Since to a great extent, neurotic conflicts deal with aspects of the human personality which are highly charged with emotional feeling, with instinctual wishes and drives that are for the most part taboo in any particular culture, it adds to the difficulty of the patient, who eventually has to face these forbidden topics openly and consciously, to sense in the physician a judge rather than a therapist. Many of you have undoubtedly had the experience of an adolescent youngster coming to your office full of anxiety and somatic complaints, which represent a guilty reaction to the universal conflict of auto-eroticism. If the adolescent is encouraged by a neutral, sympathetic attitude, and is allowed to tell his story, soon, in most instances, the basic worry associated with this problem will come out into the open, and in most cases mild reassurance is all that is necessary for the relief of the difficulty. On the other hand, if the physician attempts to lecture, to sit in moral judgment, the usual result is an increase in symptoms, guilt, and anxiety.

One of the most necessary therapeutic agents for the symptomatic treatment is that of emotional catharsis. We are all familiar with the fact that any emotional situation or conflict is eased a great deal if opportunity is given for "getting it off one's chest." The continued suppression of emotion usually leads to anxiety, tension, and in some instances to actual somatic repercussions. Emotional experiences which are ventilated to the physician with the appropriate discharge of the feeling may in this way relieve the presenting symptoms. It is essential in allowing for this emotional catharsis to give the patient an opportunity for reorienting himself by obtaining a perspective of the various factors involved. Hostilities which cannot be vented in direct action, if verbalized and placed in proper perspective, may very often disappear. In the light of our

knowledge of the unity of the individual's personality and the fact that emotional experiences may be repressed into the unconscious, one may readily see that a current emotional experience or conflict may become associated with similar experiences in the past, and very often a current experience which in itself may not be of overwhelming importance assumes importance to the individual because it acts as a sort of trigger mechanism involving similar experiences in the past.

For effective therapy, it is not always sufficient to explore only the current situation; it is often necessary and advisable to attempt an exploration and verbalization of the patient's previous life experiences. One sees this frequently, for instance, in relation to current rivalries and hostilities. When the patient is allowed by the therapist to tell his story and to express himself, one may find that the present situation is actually merely a repetition of previous similar experiences and that the emotions involved date back to earlier times.

In discussing psychotherapy in general practice, it is important to emphasize its limitations as well as its possibilities. All problems involving psychotherapy, as all those involving other forms of therapy, are related fundamentally to the problems of diagnosis, and it should be realized that there are many neurotic syndromes of such severity that they require highly specialized tech-

nique of treatment. There is a difference between a problem of simple hysteria and one of a severe compulsive neurosis of long duration, in the same way that there is a difference between problems of minor and major surgery. The realization of the limitations inherent in psychotherapy will save one from a great many disappointments. In a general hospital it is too often the experience of the psychiatrist that patients are kept on at special clinics for a long period of time either because of faulty diagnosis, or because of more or less haphazard psychotherapeutic measures. An attempt should be made to estimate the severity of the reaction and the possibilities of therapeutic help. The more difficult problems should be referred for specialized help. It is possible, however, if one has a realization of the dynamic factors involved in the psychoneuroses, to carry a patient along for many years in a therapeutic situation based essentially on the relationship to the physician.

With the constant realization that a neurosis represents an attempt on the part of the individual to adjust to conflicting inner and outer demands, one may orient one's psychotherapeutic efforts in the direction of helping the individual towards such an adjustment, and in this way relieve him of the more imminent and drastic aspects of his symptoms and allow for adjustment of his life's problems at a moderately successful level.

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In a survey of conditions in 17 cement plants located in various parts of the United States, it was found that the incidence of tuberculosis and other chronic infections of the lungs was less among the employees than in the general population. The manifestations of tuberculosis occurred in typical form and at the same age periods as in persons not exposed to dust by occupation. It was concluded that prolonged inhalation of cement has no unfavorable influence upon susceptibility to tuberculous infection or upon its subsequent evolution.—LEROY U. GARDNER, M. D., *Jour. of Industrial Hyg. and Toxicology*, Sept., 1939.

WAR . . . . . makes pleasant news for the tubercle bacillus. As the deaths from T. N. T. increase, those from tuberculosis lag not far behind. In the World War all countries showed this phenomenon whether under arms or not. What effect on our efforts to eradicate tuberculosis will these grim months ahead bring forth? . . . . Unless we find a way to redouble the offensive against our hidden enemy, the sad story of twenty years ago will be told again and we will find ourselves facing a record of lost ground.—KENDALL EMERSON, M. D.



## *A Clinical Analysis of Insulin Hypoglycemic Shock Therapy for Schizophrenia at the Bangor State Hospital from December 1, 1937, to January 1, 1940\**

(PRELIMINARY REPORT WITH A BRIEF REVIEW OF THE LITERATURE)

By EDWARD BLANK, M. D., Bangor, Maine

Insulin shock therapy for Schizophrenia was begun at the Bangor State Hospital December 1, 1937, and has since been employed continuously with the exception of a few weeks when suitable cases were lacking. The time has come, therefore, when it seems advisable, primarily, to take inventory of our progress and, secondly, to compare our experiences to those of a few others who have treated more cases and whose results may be considered somewhat more representative.

Obviously, in a paper as brief as this no exhaustive review of the literature can even be attempted and only the results of a few well-known workers in the field will be cited. Also, the theoretical basis for the treatment will be studiously avoided, for since no one, as yet, has satisfactorily explained the *modus operandi* of this dramatic therapeutic procedure such a discussion would not add to the clarity of the situation. The highly intriguing though difficult and speculative matters must be reserved for another time for it is not within the scope of this paper to defend the treatment on the basis of sound theoretical principles, or on any other ground, for that matter. For such an erudite discussion I refer the reader to a paper and monograph by Sakel (1 and 2), and others (3 and 4). I might add further that it is definitely not the purpose of this paper to draw any sweeping conclusions—but rather to state a few facts as they have appeared before us. To do any more at the present time would raise false hopes, only perhaps to be horribly disappointed later.

An extremely recent contribution to the literature by Heilbrunn and Sternlieb (5), reporting their experience with 315 patients diagnosed as Schizophrenics by ten to fifteen

different examiners at the Elgin (Illinois) State Hospital, indicates that 82% of their patients showed some degree of improvement or recovery in cases with a duration *under seven months*; 55% showed some degree of improvement or recovery in the group whose illness was between seven and eighteen months but only 10% of the cases with a duration over eighteen months showed any beneficial results. They maintain, further, that sixty out of one hundred patients with a duration of illness *not exceeding eighteen months* can be expected to maintain recovery or great improvement for twelve months or even longer. They had 15% relapses in the first two groups, and they had no mortality. For a disease like Schizophrenia, with such a universally notorious reputation for hopelessness, one must admit that these are, indeed, very hopeful and impressive figures. They merit serious thought and consideration, even by those who hesitate to accept them at face value, or at all.

Perhaps the most comprehensive and convincing paper in all American literature on the subject, especially from the standpoint of numbers, is by Ross and Malzberg (6). Their report is based on the results of 1575 cases, a number representing the cases treated in all of the New York State Hospitals. Of this notable number 1118 or 63% showed some degree of improvement or recovery. Certainly, it must be very difficult, even for the most cautious skeptics and severe critics, to thrust these figures aside. Their controls showed only 20% improvement or recovery. In their experience the *paranoids* showed the best response. A follow up study of their cases approximately one year later indicated that a significant proportion of the patients

\* Presented at the Nervous and Mental Disease Conference at the 88th Annual Session of the Maine Medical Association at Rangeley Lakes, Maine, June 25, 1940.

remained well. They had a mortality of 1.1% but curiously enough their mortality for the controls ran higher, 4.6%. In this connection it might be added that Vander Veer and Reese (7), in a comprehensive review of the literature, published one year before the paper of Ross and Malzberg appeared, found that in 1756 collected cases there were 13 deaths, or a mortality of .74%. This is, indeed, an extremely low mortality for a procedure which might be compared to the hazards of major surgery for potential dangers—

Bond, Hughes, and Flaherty (8), in reporting their experiences with 82 cases stated that of these, 31 or 38%, remained well eight months after the treatment was terminated but the number who showed some degree of improvement or recovery immediately after the treatment was not indicated. They concluded further that the best responses were in those cases whose duration was *less than one year*. They found that cases with the *shortest duration were least likely to relapse*.

They had no deaths and they gave the opinion that “no patients were worse off mentally, physically, or neurologically after the treatment.” Apparently the dangers of the treatment have hitherto been somewhat exaggerated.

Niver, Weisz and Harris (9), indicate in their study of 106 Schizophrenics treated with insulin, 63 or approximately 60%, benefited markedly. They observed, further, that 77.41% showed some degree of improvement or recovery in cases with a duration of less than six months. Again and again we see the emphasis and importance placed upon the value of early treatment. In their investigation the *paranoids* showed the most favorable response. Their mortality was 3%.

In the clinic of Vander Veer and Reese (7) 70% or 34 cases showed good remissions within one year after onset of the disease. Their chronic cases showed practically no response which is the usual experience of all workers. At their clinic the *Hebephrenics* gave the best results.

1. SUMMARY OF THE LITERATURE DISCUSSED

<i>Investigator &amp; No. Hospital Cases</i>	<i>% Imp. &amp; Rec. After Treatment</i>	<i>Type best responding</i>	<i>Remarks</i>
Heilbrunn and Sternlieb (Elgin State) 315	82% early cases. 55% late cases.	Same for all.	15% relapses. No mortality.
Ross & Malzberg (New York State Hospital System) 1757	63% average for all cases.	Paranoids.	Few relapses. % not given. 1% mortality but mortality of controls 4%.
Bond, Hughes & Flaherty (Pennsylvania Hospital) 82	% recoveries immediately after treatment not given. 38% remained well 8 months after treatment.	Not indicated.	No mortality. Opinion given that no patient worse off physically, mentally or neurologically after treatment.
Niver, Weisz & Harris Galveston (Texas) State Psychopathic 106	77% early cases (under 6 months). 59.44% average for all types.	Paranoids.	Mortality rate 3%, A few relapses reported.
Vander Veer & Reese (Wisconsin Psychiatric Inst.) 34	70% early cases (under 1 year).	Hebephrenic.	No mortality. Relapses not reported on.
Blank (Bangor State) 44	71.43% average for all cases treated.	Hebephrenic.	No mortality. No permanent complications following treatment in any case. 33.33% relapses. 66.66% of improved or recovered cases have remained out of the hospital from 2 months to 28 months.



We treated in all 44 cases; 32 men and 12 women ranging in ages from seventeen to thirty-seven; the types of schizophrenia included 19 hebephrenics, 18 catatonics and 7 paranoids.

The results immediately after treatment can be studied from several points of view:

- (1) Response with regard to sex
- (2) Response with regard to type of Schizophrenia
- (3) Response with regard to duration of disease before treatment (estimated) and we shall examine the data in that order.

(1) *Response with regard to sex:*

Of the 32 men, 5 or 15.62% improved; 20 or 62.5% recovered and 7, or 21.87% were unaffected by the treatment; in other words, a total of 83% of the men showed some degree of improvement or recovery. Of the 12 women, 2 or 16.6% improved; 4 or 33.33% recovered and 6 or 50% showed no change. (CHART 2).

CHART 2

RESPONSE WITH REGARD TO SEX



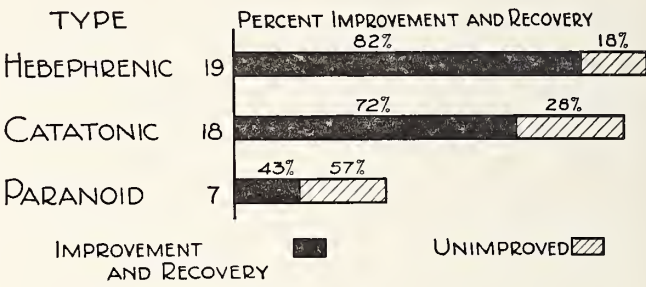
(2) *Response with regard to type of Schizophrenia:*

- (a) Of the 19 *Hebephrenics*, 4 or 22% improved; 12 or 63% recovered; and 3 or 15% showed no improvement. It can be readily seen, therefore, that 85% of this group showed some degree of improvement or recovery.
- (b) Of the 18 *Catatronics*, 4 or 22% improved; 9 or 50% recovered and 5 or 28% were unaffected by the treatment. A total of 72% therefore showed some degree of improvement or recovery.

(c) Of the 7 *Paranoids*, 3 or 43% recovered and 4 or 57% showed no change (CHART 3).

CHART 3

RESPONSE WITH REGARD TO TYPE OF SCHIZOPHRENIA



(3) *Response with regard to duration of disease before treatment (estimated):*

(a) *Under 6 months* (10 cases) 1 improved and 9 recovered indicating that 100% showed some degree of improvement or recovery. This group showed the most favorable response.

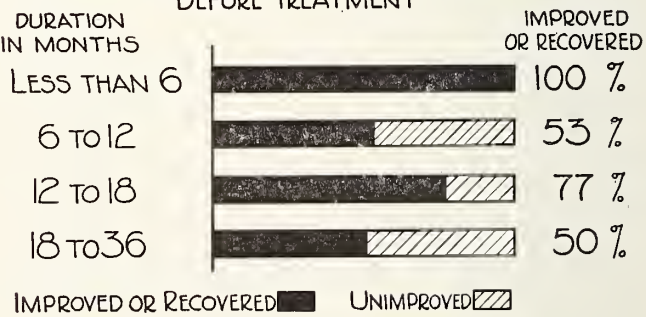
(b) *6-12 months*:—(15 cases) 3 or 20% improved; 5 or 33% recovered; and 7 or 47% showed no change. 53.3% showed some degree of improvement or recovery.

(c) *12-18 months*: (9 cases) 3 or 33% improved; 4 or 44% recovered; and 2 or 22% were uninfluenced by the treatment. 78%, therefore, showed some degree of improvement or recovery.

(d) *Over 18 months and up to the 36 months*: (10 cases) 5 or 50% recovered; 5 failed to show any response. (CHART 4).

CHART 4

RESPONSE WITH REGARD TO DURATION BEFORE TREATMENT



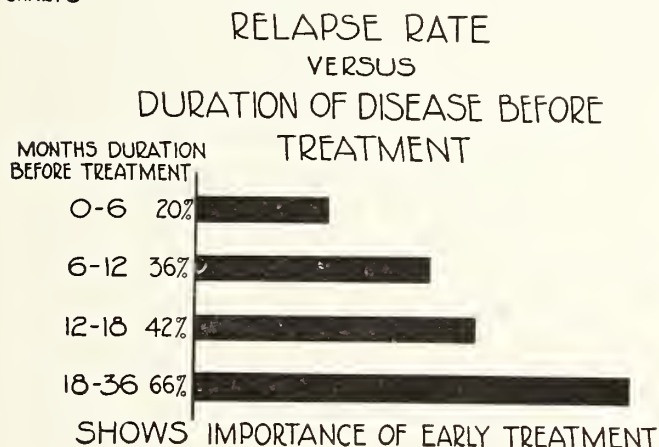
Now let us see what became of the patients who showed some degree of improvement or recovery immediately after treatment and who left the hospital. We find that a striking relationship exists between the (estimated)

duration of the disease before treatment and the probability of relapse, hence:

- (a) Under 6 months: 20% relapsed.
- (b) 6-12 months: 36% relapsed.
- (c) 12-18 months: 46% relapsed.
- (d) 18-36 months: 66.66% relapsed.

The obvious conclusion again, therefore, is early treatment (CHART 5).

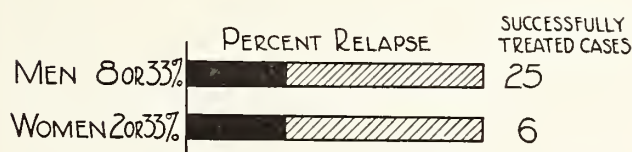
CHART 5



If we consider the relapsed cases from the standpoint of sex, we find that there were 8 men and 2 women. Since the 2 women who relapsed were in a series of 6 successfully treated cases, it is obvious, therefore, that 33.33% of the women relapsed. In the men, since 8 relapsed out of 25 apparently successfully treated cases, the relapse rate for them is also about 33%. These figures indicate that in our series the relapse rate is the same for men as for women (CHART 6).

CHART 6

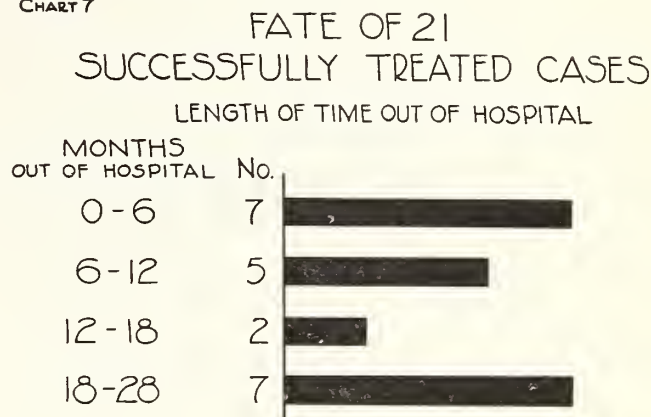
#### RELAPSE RATE BY SEX



If we examine the data concerning those who have not relapsed, we find that 21 patients of the original 31 successfully treated cases still remain out of the hospital. If we study this group a bit more closely, especially with regard to the length of time they have been out of the hospital, we find that 7 or 33.33% have remained out less than 6

months; 5 or 23% have remained out from 6 to 12 months; 2 or approximately 10% between 12 and 18 months; and 7 or 33.33% from 18 to 28 months are in good health as far as we know (CHART 7).

CHART 7

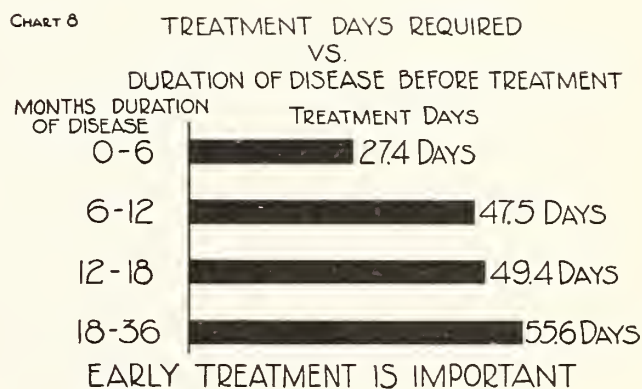


Another extremely important and interesting observation reveals that those cases whose durations were the shortest required the least number of treatment days for success.

- a. Under 6 months, 27.4 days.
- b. 6 to 12 months, 47.5 days.
- c. 12 to 18 months, 49.4 days.
- d. 18 to 36 months, 55.6 days.

The average number of treatment days in the successfully treated cases was 40.5 (CHART 8).

CHART 8



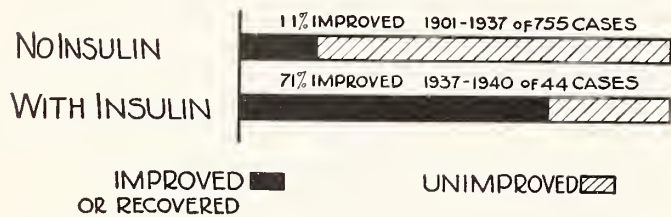
Although it must be admitted that no parallel controls were run, nevertheless, a search through the hospital records reveals that from 1901 to 1937, 755 cases were diagnosed as Schizophrenia, and of these, 88 or 11.6% showed any degree of improvement or recovery; of our 44 Insulin treated cases between 1937 and 1940, 31 or 71.43% showed some degree of improvement or recovery



(CHART 9). Certainly these figures speak far more eloquently than any humble words of mine.

CHART 9

INSULIN vs NON-INSULIN TREATED CASES  
BANGOR STATE HOSPITAL



SUMMARY

- (1) From December 1, 1937, to January 1, 1940, 44 diagnosed cases of Schizophrenia were treated by Sakel's modified method of insulin hypoglycemia at the Bangor State Hospital. Of these, 32 were men, and 12 were women, ranging in age from 17 to 37.
- (2) Of the 44 cases, 19 were designated as Hebephrenics; 18 as Catatonics and 7 as Paranoids.
- (3) 83% of the men showed some degree of improvement or recovery, whereas 50% of the women showed some degree of improvement or recovery.
- (4) Patients with the shortest duration of disease (estimated) before treatment, showed the highest recovery rate. The most favorable response was shown in those cases whose illness was under 6 months, followed by those whose illness had not exceeded a year.
- (5) Those with the shortest duration required the least number of treatment days and the shortest period of hospitalization. The average number of treatment days for the whole group of successfully treated cases was 40.5.
- (6) Successfully treated cases with the shortest duration were least likely to relapse.
- (7) Of the successfully treated cases, 33.33% relapsed and 66.66% remain out of the hospital from 2 to 28

months. The relapse rate for men and women is the same.

- (8) Of 755 diagnosed Schizophrenics at the Bangor State Hospital from 1901 to 1937, only 88 or 11% showed any degree of improvement or recovery, whereas of the 44 insulin treated cases, 31 or 71% showed some degree of improvement or recovery.
- (9) There were no fatalities, nor were there any temporary or permanent complications following the treatment.
- (10) The review of the literature reveals that the results at the Bangor State Hospital compare very favorably with those at the larger and perhaps better known clinics throughout the country which employ this striking method of treatment.

STATISTICAL SUMMARY

Total Number Treated 44  
(Ages 17-37)

- (1) *Results with regard to sex*

	Men	Women
a. Number	34	12
b. Imp'd or recovered	83%	50%
c. Relapses	33%	33%
- (2) *Response with regard to type of disease: Improved or Recovered*

a. Hebephrenics	85%
b. Catatonics	63%
c. Paranoids	43%
- (3) *Response with regard to duration of disease before treatment*

a. Under 6 months—100% improved or recovered
b. 6-12 months—53% improved or recovered
c. 12-18 months—78% improved or recovered
d. 18-36 months—50% improved or recovered

(4) *Relapse rate in relation to duration before treatment*

a. Under 6 months	20%
b. 6-12 months	36%
c. 12-18 months	46%
d. 18-36 months	66%

(5) *Duration vs. required number of treatment days for success*

a. Under 6 months	27.4
b. 6-12 months	47.5
c. 12-18 months	49.4
d. 18-36 months	55.6

(6) *Comparison of diagnosed Schizophrenics treated with Insulin to those treated without Insulin*

	Without Insulin 1901-37	With Insulin 1937-40
Total number	755	44
Improved or recovered	88	31
Percent improved or recovered	11.8	71.43

REFERENCES

(1) Sakel, Manfred: The Methodical Use of Hypoglycemia in Treatment of Psychoses. *Am. Jour. Psychiat.*, 94:1, 111-129, July, 1937.

(2) Sakel, Manfred: Pharmacologic Treatment Schizophrenia. *Nervous and Mental Disease Monographs*, Number 62, Nervous and Mental Disease Publishing Co., New York and Washington.

(3) Kepler, Edwin J.: The Psychiatric Manifestations of Hypoglycemia. *Am. Jour. Psychiat.*, 94:1, 89-108, July, 1937.

The prognosis of pleurisy with effusion with negative, doubtful or extremely slight pulmonary findings by X-ray is excellent if patients receive at least four months of sanatorium care; in fact, it is almost as good as the normal population in the same age group.—FRANCIS B. TRUDEAU, M. D., *Amer. Rev. of Tuber.*, Jan., 1939.

As a result of widespread use of collapse therapy in its dual capacity as a public health instrument and a medium of cure, the medical personnel of the Chicago Municipal Tuberculosis Sanitarium have become convinced that it offers the patient his best chance and

(4) Young, Alexander: Young, Richard H., and Roucek, L.: Experiences with Hypoglycemic shock treatment of Schizophrenia, 94:1, *Am. Jour. Psychiat.*, 158-170, July, 1937.

(5) Heilbrunn, Gert, and Sternlieb, Ruth: Insulin Therapy Schizophrenia in Elgin (Illinois) State Hospital. *Am. Jour. Psychiat.*, 96:5, 1202, March, 1940.

(6) Ross, John R., and Malzberg, Benjamin: A Review of the Results of Pharmacological Shock Therapy and Metrazol Convulsive Therapy in New York State. *Am. Jour. Psychiat.*, 96:2 297-316, September, 1939.

(7) Vander Veer, A. N., and Reese, H. H., *Am. Jour. Psychiat.*, 95:2, 271-289, September, 1938.

(8) Bond, Earl D., Hughes, Joseph, and Flaherty, James. a. Results and Observations on Insulin Shock Treatment of Schizophrenia. *Am. Jour. Psychiat.*, 96:2, 317-326, September, 1939.

(9) Niver, E. O., Weisz, S., and Harris, T. H.: Insulin Hypoglycemia Treatment of Schizophrenia; Results and Follow-up Studies of 106 cases. *Am. Jour. Psychiat.*, 95:4, 799-807, January, 1939.

ACKNOWLEDGMENT

I wish to express my thanks and appreciation to Dr. Carl J. Hedin, Superintendent, for assigning to me the important and stimulating task of carrying out Insulin Shock Therapy for Schizophrenia at the Bangor State Hospital. I wish to thank, also, Dr. A. Douglas Glanville, Department of Psychology, University of Maine, for performing many of the psychometric tests before and after treatment.

the community its best protection.—A. J. HRUBY, M. D., *Amer. Rev. of Tuber.*, Sept., 1939.

The early symptoms of renal tuberculosis are not appreciated, and genito-urinary tuberculosis is regarded as a disease by itself and not as a manifestation of a generalized tuberculosis condition. As a result, adequate convalescence and expert after-care are not insisted upon. Sanatorium treatment and continued supervision after operation or local treatment will favorably influence the general prognosis.—J. CARVER, M. D., *Tubercle*, Apr., 1939.



## *Subdiaphragmatic Air as a Sign of Perforated Peptic Ulcer*

By HENRY G. HADLEY, M. D., Washington, D. C.

There are many cases of perforated peptic ulcer which recover spontaneously. Speck<sup>1</sup> stated that one to two per cent recover without operation. These figures do not necessarily reflect the total that might recover without operation, as surgery is indicated unless it is reasonably certain that the perforation is already spontaneously closed.

Singer<sup>2</sup> reported a series of forty spontaneous recoveries in eighteen months in Cook County Hospital. Quite a number of patients refuse operation and often appear to have exercised good judgment as recoveries have followed. He differentiated free from walled off perforations by board-like resistance of both recti, pain referred to the shoulder, obliteration of liver dullness, collapse symptoms and the presence of free air demonstrated by the X-ray film.

The presence of air under the diaphragm was present in eighty-three per cent of perforations in Johnson's<sup>3</sup> forty-two cases, the average time noted being eight and one-half hours. This free air must be sought for by X-ray examination in the upright position so that it will appear above the liver. This is of value only for a short period unless there is continued leakage because the air soon absorbs.

### *Case Report:*

Mr. M. J., male, white, aged 42, suffered with severe pain in the upper abdomen. He worked a portion of the day until the pain became so unbearable that the company physician administered morphine and sent him home. He first came under my observation September 29, 1938, at 3.00 P. M., at which time was found typical physical findings of a ruptured ulcer, with board-like

rigidity of both recti, and obliteration of liver dullness. The onset had been ten hours previous to this but he refused operation and hospitalization and gave as his reason that he had recovered from a similar attack without operation four years previous. He became rapidly better and came to the office for fluoroscopic examination the next morning. One-half inch of free air was found over the surface of the liver. He had no evidence of peritoneal infection and it was apparent that no gastric contents had escaped through the perforation. The symptoms in this case were all due to the perforation itself and the entrance of air into the abdominal cavity.

No treatment was given except for rest and an ulcer diet. Recovery was so rapid that he returned three days later to his work as a pile driver, attributing his "blow out" to the taking of a large amount of dry bicarbonate of soda to relieve his stomach distress. The reason for his recovery without surgery was no doubt due to the perforation occurring at 5.00 A. M., while his stomach was empty.

He had no evidence of peritoneal infection and it was apparent that no gastric contents had escaped through the perforation. The symptoms in this case were all due to the perforation itself and the entrance of air into the abdominal cavity.

### BIBLIOGRAPHY

1. Speck, W.: "Zur Klinik und Pathologie der in die freie Bauchhöhle perforierten Magen und Duodenalgeschwüre." *Beit z. klin. Chir.*, Tubing, 1923, CXXIX, 537-594.
2. Singer, H. A.: "Walled-off and Free Perforation of Peptic Ulcer." *M. Clin. North America*, Vol. II:36-77, July, 1927.
3. Johnson, S. E.: "The Frequency of Air under the Diaphragm in Perforated Gastric and Duodenal Ulcer." *J. A. M. Asso.*, 1937, 108:295-296.

## The President's Page

*To the Members of the Maine Medical Association:*

It has been my pleasure during the past month to attend a few county Medical Society Meetings. It is apparent to me, and has been for some time, that the physicians in all parts of the State are well qualified and capable. The individual physicians are delivering high grade medical service to their clients.

As I drove home from the meetings I tried to appraise the service rendered to the individual physicians by organized medicine in the State. The Constitution and By-Laws of the Maine Medical Association set forth the Purpose of the State Society as follows: "The purposes of this Association are to promote the science and art of medicine, the protection of Public Health and the betterment of the Medical Profession." I believe that the State and County Societies are fulfilling well the first two purposes. Scientific papers, clinical sessions, committee meetings in all sections of the State promote the science and art of medicine and protect the public health. And I further believe the more fully we develop our efforts to fulfill the first two purposes, the more we accomplish toward achieving the third object or purpose.

But no organization at this time ought to remain on the defensive. I think we must make special efforts during the coming year to improve our meetings, appoint active committees to study local problems for the care of the sick, to coöperate with public health authorities in protecting the public health, to survey our hospital needs. With careful and thoughtful work we can have committees ready to report to the State Society, to the American Medical Association and to government Bureaus in Washington. Ready to report about conditions in Maine and ready to offer recommendations if recommendations are needed, and ready to defend our position if defense is needed. If we are failing in anyway to achieve our purposes, let us be the ones to discover the failings and the ones to correct them.

I urge, therefore, the members of every County Society to re-read the Platform of the American Medical Association\* and to reflect especially on Paragraphs three, four and five, and consider the situation in his County. It seems to me that if each County Society will study seriously its local conditions, it will through organization help the individual members in their daily practice.

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\* On page 250 of this issue.

THOMAS A. FOSTER, M. D.,  
*President, Maine Medical Association.*



## Editorial

### *The Challenge to America*

It is too obvious that conditions of the utmost gravity face the United States; conditions requiring cool heads, the cessation of partisan and personal politics and an appreciation of the fact that the professional politician, as such, has shown such absolute incompetency that Europe is a slaughter house with mad men as bosses of the killing floor. Far from content with their successes to date they openly proclaim that butchery, death and destruction, "the like of which the world has never seen," is to be extended with satisfaction obtained only when the last victim of their hideous hate is rendered prostrate and broken beyond repair. Following their anticipated success they promise and have prepared economic and other reprisals against any countries or peoples who have incurred their hostility or who fail to conform to rules they will set up. To the United States of America this presents a positive and ominous challenge. A challenge that the form of government we have established and chosen shall continue; that we may continue to maintain our liberties and live and work as a free people. To meet this threat we can do one of two things. We can become *in fact* The United States of America or we can add to the success of any and all dictators by becoming a house divided. There is hard work to do, plenty of it, and it must be done speedily but intelligently. Mass hysteria, unfair propaganda directed against those of opposite political or personal beliefs or the adoption of any of the methods of Nazi Germany, Fascist Italy or Communistic Russia are not for us.

The President has spoken of "new forces being unleashed with deliberately planned propaganda to divide and weaken us in time of danger." He correctly labels this type of endeavor as undiluted poison but, as *The New York State Journal of Medicine* pertinently asks, "are any of these poisons encapsulated in the legislation purporting to advance us toward certain "social objectives"? Can physicians answer in the negative when today their national association, certain state societies and men high and hon-

ored in their profession are under criminal indictment; when the public practice of medicine is conducted by autocratic bureaus directed and controlled by political sub-divisions of the State and Federal Government; when every possible attempt has been made to undermine the private practice of physicians and medicine, as a profession, held up to scorn, ridicule, charged with incompetency and having a callous disregard for its fellow man? The House of Delegates of that same association made no idle gesture when it *unanimously* adopted a resolution, at the annual session in New York, pledging to the Federal Government the full coöperation of the American Medical Association when and if needed. Bitter as it may be for those with pure hearts to be obliged to mingle and confer with men under criminal indictment it is a fact that these same men warrant and have the confidence and respect of their profession and represent *organized medicine*.

The great opportunities that we enjoy today are founded on the sacrifices of those who, many years ago, rebelled against the tyranny and oppression of government. With the world as it is further sacrifices must be made since appeasement and compromise will do nothing but aid in the destruction of all democracy everywhere. Warships, planes, battleships and submarines become a necessary part for our defense. However, they are useless in themselves and must be operated by those with particular skill. That skill must come from careful training since there is no substitute for experience. In *all* our preparations the members of the medical profession occupy a most important part. It would be most unfortunate if the natural resentment against unfair tactics and practices by the profession should be manifested by indicating a lack of sympathy with the present needs of the nation or failing to carry out the instructions authorized by the house of delegates. Disapproval of any man, men or political parties should be registered at the ballot box. The bitter humiliation of defeat will be ours, as it has been the people's of other lands, unless we are prepared to meet any aggressor in *any* way.

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## Necrology

*George F. Way, M. D.,*

*1875-1940*

Doctor George F. Way, 65, practicing physician in Lincoln, Maine, for 40 years, died suddenly July 30, 1940.

Doctor Way was born in East Corinth, Vermont, the son of the late Mr. and Mrs. George F. Way. He attended St. Johnsbury Academy and was graduated from the Bellevue Medical School in 1897. Following his graduation he practiced in Lee and Bath before moving to Lincoln.

Doctor Way had recently resigned as Medical

Examiner for Penobscot County, a position he had held for 20 years.

He was a member of the Penobscot County Medical Society, Maine Medical Association, and American Medical Association, and of Masonic bodies, including Anah Temple, Ancient Order of the Mystic Shrine.

He is survived by his wife, Florence Hackett Way, a son, George of Cleveland, Ohio, and two daughters, Mrs. Gardner Brown and Mrs. John Adams, both of Lincoln.

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## County News and Notes

### *Coming Meetings*

#### *Kennebec*

Kennebec County Medical Association, Frederick R. Carter, M. D., Augusta, Maine, Secretary.

Thursday, September 19th, at the Gardiner General Hospital, Gardiner, Maine. Program to be announced.

Thursday, November 21st, at the Elmwood Hotel, Waterville, Maine. Program to be announced.

Thursday, December 19th, at the Augusta State Hospital, Augusta, Maine.

Speaker: A Warren Stearns, M. D., of Boston.

Subject: To be announced.

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### *New Members*

#### *Androscoggin*

Max Hirshler, M. D., Lewiston, Maine.



## The Platform of the American Medical Association

The American Medical Association advocates:

1. The establishment of an agency of the federal government under which shall be coördinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.
2. The allotment of such funds as the Congress may make available to any state in actual need, for the prevention of disease, the promotion of health and the care of the sick on proof of such need.
3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.
4. The development of a mechanism for meeting the needs of expansion of preventive medical

services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American system of democracy.

## Notices

### Tumor Clinics

- Bangor:** *Eastern Maine General Hospital*  
Thursday, 11.00 A. M.-12.00 M.  
Director, *Magnus F. Ridlon, M. D.*
- Lewiston:** *Central Maine General Hospital*  
Tuesday, 10.00 A. M.-12.00 M.  
Director, *E. V. Call, M. D.*  
*St. Mary's General Hospital*  
Wednesday, 4.00 P. M.  
Director, *R. A. Beliveau, M. D.*
- Portland:** *Maine General Hospital*  
Thursday, 11.00 A. M.-12.00 M.  
Director, *Mortimer Warren, M. D.*
- Waterville:** *Sisters Hospital*  
1st & 3rd Thursdays, 10.00 A. M.  
Director, *B. O. Goodrich, M. D.*  
*Thayer Hospital*  
2nd & 4th Thursdays, 10.00 A. M.  
Director, *E. H. Risley, M. D.*

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Millinocket, Old Town, Portland, Presque Isle, Rockland, Rumford, Sanford, Waterville, Wilton, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on request to the Director, State Bureau of Health, Augusta, Maine.

### For Sale

Private Hospital located in quiet residential section of Portland, Maine. Accommodations for 24 patients. Operating Room. Anesthesia Room. Laboratory, bath and ample space for treatment rooms in basement. Equipped with Nurses' Call System. Large piazza. Fire escapes. Slate Roof. Third floor insulated. New plumbing throughout. New Oil heater. Two-car garage. In excellent state of repair. Could be used for small Private Hospital, Obstetrical Hospital, Convalescent or Nursing Home. Apply to: C. P. Wescott, M. D., 1600 Forest Avenue, Portland, Maine.

### Venereal Disease Clinics

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

### Fall Clinical Session

The Annual Fall Clinical Session of the Maine Medical Association will be held at Bangor Maine. The session will open with a dinner at the Bangor House at 8.00 o'clock, Thursday evening, October 17th. An all day clinical program will be conducted on Friday, October 18th. Complete program will be published in the October issue of the JOURNAL.

## Special Notices

### *Examinations American Board of Obstetrics and Gynecology*

The annual written examination and review of case histories (Part I) for Group B candidates will be held in various cities of the United States and Canada on Saturday, January 4, 1941, at 2.00 P. M. Candidates who successfully complete the Part I examinations proceed automatically to the Part II examinations held later in the year.

The following action regarding case records to be submitted by candidates taking the Group B, Part I, examination was passed by the Board at its annual meeting in Atlantic City, N. J., on June 6, 1940: "Case records submitted by candidates must be of patients treated within four years prior to the date of the candidates' application. The number of cases taken from one's residency service should not be more than half (25) of the total number of fifty (50) cases required."

Applications for admission to Group B, Part I, examinations must be on file in the Secretary's Office not later than October 5, 1940.

The general oral and pathological examinations (Part II) for all candidates (Groups A and B) will be conducted by the entire Board, meeting at Cleveland, Ohio, immediately prior to the June, 1941, meeting of the American Medical Association.

After January 1, 1942, there will be only one classification of candidates, and all will be required to take the Part I and Part II examinations.

For further information and application blanks, address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh (6), Pennsylvania.

### TRAINING REQUIREMENTS

In response to numerous inquiries regarding special training requirements, the Board desires again to announce that there are three methods of meeting these requirements for admission to the Board examinations. First by the residency system; second, by the partial residency and partial assistantship method; and third, entirely by the assistantship or "preceptorship method." Details of the residency requirements are given in the Board booklet. The Board will accept in lieu of the formal residency service the training acquired by a candidate serving on an assistant or dispensary staff of an obstetrical and gynecological division of a recognized Hospital, under the direction of a recognized obstetrician-gynecologist (preferably a Diplomate). The time required for this type of training, must be longer than with the formal, more intensive residency type of training, and the allowance of time depends upon the duties and responsibility given the candidate. Applicants lack-

ing all formal special training should have a minimum of five years of hospital clinic, or assistant staff appointments in the specialty, under approved direction. Teaching appointments without accompanying hospital staff or clinical appointments will not satisfy the Board requirements. A special form amplifying the original application must be filled out to cover the details of such assistantship, or preceptorship type, of training. The Board approves for special training, work done in institutions approved jointly by the Board and by the Council on Medical Education and Hospitals of the A. M. A.

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### *Annual Meeting of Eye and Ear Specialists*

The American Academy of Ophthalmology and Otolaryngology will hold its forty-fifth annual convention in Cleveland, October 6 to 11, with headquarters at the Hotel Cleveland.

The Academy, an organization of more than 2,500 specialists in diseases of the eye, ear, nose and throat, carries on an active program of education for its members. In addition to scientific papers, an elaborate series of courses is presented at each convention to bring the members up to date in their chosen fields. More than 100 of these teaching lectures will be offered this year.

In the past year arrangements have been made to extend the teaching activities to young physicians just entering on specialization. Home study courses are being prepared for any of these young men who wish to take them and their work will be supervised by members of the academy interested in improving the caliber of specialists in practice.

The Cleveland meeting will be noteworthy in several respects.

The Academy will honor Dr. Secord H. Large, Cleveland, who this year completes thirty years as comptroller of the organization. Dr. Large as the honor guest of the meeting will receive many special distinctions.

Immediately following the Academy meeting, there will be a Pan-American Congress of Ophthalmology, October 11 and 12, which eye specialists from all the Latin American countries are expected to attend.

Dr. Frank Brawley, Chicago, is president of the Academy and Dr. Frank R. Spencer, Boulder, Colo., is president-elect. Vice presidents are Drs. Arthur W. Proetz, St. Louis; Joseph F. Duane, Peoria, Ill., and Charles T. Porter, Boston. Dr. William P. Wherry, 1500 Medical Arts Building, Omaha, is executive secretary.



### *Announcement of a Study to Evaluate Original Serologic Tests for Syphilis*

More than five years ago the Committee on Evaluation of Serodiagnostic Tests for Syphilis, in connection with the United States Public Health Service, conducted a study to evaluate original serologic tests for syphilis or modifications thereof in the United States. The results of this study were published shortly after the investigation was completed.<sup>1</sup>

Consideration is now being given by the Committee to the organization of a second evaluation study of original serologic tests for syphilis or modifications thereof within the next year. If the need for an investigation of this kind seems to justify the cost, invitations will be extended to the authors of such serologic tests who reside in the United States, or who may be able to participate by the designation of a serologist who will represent them in this country. The second evaluation study will be conducted utilizing methods comparable to those employed in the first study.<sup>2</sup>

Serologists who have an original serologic test for syphilis or an original modification thereof and who desire to participate in the second evaluation study should submit their applications not later than October 1, 1940. The applications must be accompanied by a complete description of the technic of the author's serologic test or modification. All correspondence should be directed to the Surgeon General, United States Public Health Service, Washington, D. C.

<sup>1</sup> Ven. Dis. Inform., Washington, June, 1935, 16: 189. J. A. M. A., Chicago, June 8, 1935, 104:2083.

<sup>2</sup> J. A. M. A., Chicago, Dec. 1, 1934, 103: 1705.

### *American Board of Ophthalmology*

#### IMPORTANT ANNOUNCEMENT

*There will be only one written examination during 1941.* This will be held in various cities throughout the country on March 8th.

Candidates enrolled in the Preparatory Group who have been advised that they will be eligible for examination during 1941 should make application *at once* to take this written examination.

Application must be made on the regular blanks provided for the purpose and must be received in the Board Office before *December 1, 1940*.

*Oral Examinations, 1941*

Cleveland, May or June.

October (place to be announced later).

*Deadline for  
Case Reports*

February 1st.

July 1st.

A special oral and clinical examination will be held on the Pacific Coast during 1941 providing there will be enough candidates to warrant it. Applications for this examination should be filed before September 1, 1940, so that the Board may complete necessary arrangements.

If you plan on taking your examination during 1941, please write at once to the Board Office for formal application blanks, indicating your preference of examination place.

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## Book Reviews

### *"Synopsis of Obstetrics"*

By: Jennings C. Litzenberg, M. D., F. A. C. S.,  
Professor Emeritus of Obstetrics and Gynecology,  
University of Minnesota Medical School, Minneapolis,

with 157 Illustrations, including 5 in color.

Published by The C. V. Mosby Company, St. Louis,  
1940. Price, \$4.50.

The gradually but steadily increasing Mosby Synopsis series of medical aids is enriched by this volume on obstetrics. The author's aim was to minimize irrelevant material, emphasize the important, attempt to properly evaluate matters of relative uncertainty of the newly introduced means and methods of diagnosis and therapy and at the same time present all material so that it permits of application of sound judgment. The illustrations employed are those of well known authors of textbooks on obstetrics and gynecology because the author believes that good clear illustrations greatly improve the educational value of visual demonstrations of technique. Of course, proper credit is given in every case.

### *"Simplified Diabetic Manual"*

By: Abraham Rudy, M. D., Associate Physician  
and Chief of the Diabetic Clinic, Beth Israel  
Hospital; Instructor in Medicine, Tufts College  
Medical School, Boston.

With 163 International recipes.

Introduction by Frederick M. Allen, M. D.

Published by M. Barrows Company, Inc., New  
York, 1940. Price, \$2.00.

This is the second edition of a successful patient's manual. It is the author's conviction that whenever the diabetic person follows the instructions of his physician in regard to the administration of insulin and proper selection of suitable diet, his life can be maintained at a reasonably happy level and with hope for normal maturation. This edition is completely revised to include the latest developments in the medical treatment of diabetes. It also includes many dietary recipes of American, Jewish, French, German, Italian, Armenian, etc., food combinations for the diabetic's use. These are so arranged that they may be prepared by any adult person who suffers with diabetes or who takes care of one who does. Not only the diabetic patient but the busy practitioner, dietitian and nurse as well, should find this book very helpful.

### *"Clinical Diabetes Mellitus and Hyperinsulinism"*

By: Russell M. Wilder, M. D., Ph. D., F. A. C. P.;  
Professor and Chief of the Department of  
Medicine, The Mayo Foundation for Medical  
Education and Research, University of Minnesota;  
Head of the Section on Metabolism  
Therapy, Division of Medicine, The Mayo  
Clinic, Rochester, Minnesota.

Illustrated.

Published by W. B. Saunders Company, Philadelphia and London, 1940. Price, \$6.00.

The writer of this excellent monograph knows from long experience with diabetes in all its phases that any one who treats a diabetic patient must know a great deal about the patient, about diabetes, about diet, about insulin, and about all of these in various combinations, as determined by the many interrelated physiologic, pathologic, pharmacologic, and therapeutic processes to which the patient as a unit is subjected and to which he responds. Since "the requirements for effective therapy without which the prognosis and course of diabetes are affected unfavorably include: (1) some knowledge of the subject on the part of the physician—more knowledge than many now possess; (2) a modicum of laboratory equipment; (3) careful instruction of patients; (4) an understanding of the principles of general nutrition; and (5) a certain amount of wisdom to temper the whole, so that treatment may be adjusted as required to meet special needs of the individual" it is of utmost importance that the diabetes treating physician acquaint himself with the contents of this very excellent monograph. It contains much useful and needed information, given by an experienced specialist in the field.

### *"The Diagnosis and Treatment of Pulmonary Tuberculosis"*

By: John B. Hawes, 2d, M. D., Late President of  
the Boston Tuberculosis Association; Director  
of the National Tuberculosis Association;  
Former Instructor in The Graduate School of  
Medicine, Harvard University;

and Moses J. Stone, M. D., Assistant Professor of  
Medicine, Boston University, School of Medicine;  
Physician to The Chest Clinic of the  
Massachusetts Memorial Hospital, Boston,  
Massachusetts, etc.

Second Edition, 75 Illustrations.

Published by Lea & Febiger, Philadelphia, 1940.  
Price, \$2.75.

This excellent pocket-sized textbook on the diagnosis and treatment of tuberculosis has been exceptionally well received in its first edition. It is destined to be even more successful in its second because the information contained therein is strictly up-to-date, reliable and contains only actually usable information. It is written from experience for practical application. The common sense attitude between physician and patient in regard to tuberculosis is maintained at all points.

### *"Psychiatry for Nurses"*

By: Louis J. Karnosh, B. S., ScD., M. D.; Associate  
Clinical Professor of Nervous Diseases,  
School of Medicine, Western Reserve University;  
Director of Neuropsychiatry, City  
Hospital, Cleveland; Consulting Neuropsychiatrist,  
Cleveland Clinic;

and Edith B. Gage, R. N., Supervisor, Neuropsychiatric  
Division, City Hospital, Cleveland.

Illustrated.



Published by The C. V. Mosby Company, St. Louis, 1940. Price, \$2.75.

Here is a student nurses' textbook of psychiatric nursing of high quality. It was written by specialists for special service. Both authors fully understand the work to be done and the need for properly taught workers. The book was written for the purpose of familiarizing the nurse quickly and reliably with the terminology of psychiatric nursing, the characteristic symptoms of the various types of psychiatric patients, the special forms of nursing care and the therapeutic methods and specific techniques that are at our command at the present time. There is no evidence of any hyper-enthusiasm. This is a practicable treatise on the practice of psychiatric nursing. The subject matter is simply described, logically arranged, clearly treated and planned for the student nurse's comprehension and the patient's benefit and welfare. All the successfully tried new remedies are included.

### *"Principles of Surgical Care—Shock and Other Problems"*

By: Alfred Blalock, M. D., Professor of Surgery, Vanderbilt University, School of Medicine, Nashville, Tenn.

Illustrated.

Published by The C. V. Mosby Company, St. Louis, 1940. Price, \$4.50.

This book is a monograph representing the Beaumont Lectures for 1940 in extended and amplified form. In it the problems of shock or peripheral circulatory failure and the many variants of contributory functional abnormalities which are associated with it are expertly considered and elaborated upon according to their relative importance. The author feels that the recent decreases in morbidity and mortality rates is primarily due to a better understanding of the nature of shock and the development of means and methods of preventing its occurrence in our pre- and post-operative medical care of the surgical patients.

### *"Complete Guide for the Deafened—Handbook of Hearing Aids"*

By: A. F. Niemoeller, A. B., M. A., B. S.; with Forewords by Harold Hays, M. D., F. A. C. S.

Published by Harvest House, New York, 1940. Price, \$3.00 each.

The number of people with impaired hearing in the United States of America ranges between 10 and 17 millions, of these about 3 millions are children. To be hard of hearing is a major handicap to students and men and women who must prepare themselves to earn a living or to change from one occupation to another by force of such impairment. In these two small books the author tries to lighten somewhat the sufferer's burden.

In the first mentioned volume, in 77 short chapters, written in clear plain language, the afflicted is told most everything that is known of hearing impairment and of its improvement by means of various methods, including various mechanical and electrical devices. The information and advice given is authoritative and is designed to help the hard-of hearing reader to find a happier place in society and to learn to re-adjust himself both to a new way of hearing and a new way of enjoying life more actively.

The second book contains a considerable amount of useful but expensively given information regarding the various hearing devices as well as hints as to the successful selection and use of the most suitable ones.

Both books are written for the lay reader who is frequently advised to consult his physician or otologist in any and all afflictions of the ear or in threatened impairment of hearing.

### *"Cancer—A Manual for Practitioners"*

Edited by Channing C. Simmons, M. D., for and published by The Committee representing the Massachusetts Medical Society and the American Society for the Control of Cancer.

Boston, Massachusetts, 1940.

This book contains a collection of brief articles on cancer of the various organs. They are written by men especially interested in cancer. Written for the purpose of informing the practicing physician concerning various phases of cancer, the book gives considerable aid in diagnosis of early cancer and its treatment as practiced today. No attempt has been made to enter into detailed discussion of radiologic or surgical techniques. The book ends with a section entitled "Suggestions for Talks on Cancer to Lay Audiences." On the whole, this small volume contains much material which the practicing physician would like to have to hand when he must discuss the cancer problem with his patients.

### *"Doctors in Shirt Sleeves—Musings on Hobbies, Meals, Patients, Sport and Philosophy"*

Edited by Sir Henry Bashford.

Published by the Veritas Press, New York, 1940. Price, \$2.50.

For the past two years the Lancet, well known British medical journal, first published in 1823, has permitted in its columns the publication of doctors' reminiscences, reflections and musings. The book under review is composed of the most worthwhile articles contributed by twenty authors. These writers did not put their thoughts on paper for the purpose of dispensing new knowledge, but while expressing their memories as they did they liberated various forms of wisdom gained in actual experience while living under most adverse conditions. Thoughts on learning, on medical students, on patients, on doctors in general and surgeons in particular are cleverly expressed and intertwined with musings on hobbies, diaries, meals, and the weather, memories of school days, toys and other things. Then too, there are critical and praising words on "Man the Unknown" and Dr. Rabelais. There is also a good deal written about philosophy and spiritual values in medicine. Man and woman, young and old, are discussed. The biology of war is thoroughly and appropriately dealt with as a social disease, a mass psychosis which has assumed epidemic proportions and is here dealt with in conformity with successful doctor-patient relationship. Whatever your taste for leisure hour reading maybe, many of the thoughts expressed on the pages of this handy volume will bring to you a welcome change of mind for many minutes, perhaps hours and days or even years if they should inspire you to try to find diversion in professional activities in far-flung regions.

PROCEEDINGS  
at the  
EIGHTY-EIGHTH ANNUAL SESSION  
of the  
MAINE MEDICAL ASSOCIATION

held at  
THE RANGELEY LAKE HOTEL  
RANGELEY LAKES, MAINE

JUNE 23, 24, 25, 1940

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HOUSE OF DELEGATES

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ELECTION OF THE PRESIDENT-ELECT



FIRST MEETING OF THE HOUSE OF DELEGATES, JUNE 23, 1940

The Opening Session of the House of Delegates of the Maine Medical Association convened on Sunday, June 23, 1940, at 4.45 o'clock in the afternoon, at the Rangeley Lake Hotel, Rangeley Lakes, Maine, with Dr. Thomas A. Foster of Portland, President-Elect of the Maine Medical Association, presiding.

CHAIRMAN FOSTER: The first meeting of the House of Delegates will please come to order. First of all, we will have the roll call by the Secretary.

(The Secretary called the roll and the following delegates responded:)

Androscoggin County: L. A. Sweatt, Auburn; M. S. F. Greene, Lewiston.

Aroostook County: H. E. Small, Fort Fairfield.

Cumberland County: E. H. Drake, F. A. Ferguson, and E. A. Greco, Portland; F. A. Smith, Cumberland Mills.

Franklin County: Harry Brinkman, Wilton.

Hancock County: M. A. Torrey, Ellsworth; R. E. Weymouth, Bar Harbor.

Kennebec County: Samuel Kagan, Augusta; Leon D. Herring, Winthrop; N. Bisson, Waterville.

Knox County: James Carswell, Camden.

Oxford County: E. M. McCarty and H. M. Howard, Rumford.

Penobscot County: Forrest B. Ames, H. C. Knowlton, H. C. Scribner, L. J. Wright, Bangor; L. H. Smith, Winterport.

Piscataquis County: F. J. Pritham, Greenville Junction.

Sagadahoc County: W. E. Kershner, Bath.

Waldo County: Carl H. Stevens, Belfast.

CHAIRMAN FOSTER: I appreciate that you have come to this early meeting. We have a quorum, so we will proceed with our business.

Last year, I congratulated Cumberland County for having all their delegates present. This year, we must congratulate Penobscot.

It is the duty of the President-Elect, as Speaker of the House of Delegates, to appoint two Committees. The first is a Reference Committee of three delegates. I should like to name on that Committee Dr. W. A. Ellingwood of Rockland, Dr. F. A. Ferguson of Portland and Dr. Foster Small of Belfast, to whom references and resolutions will be referred and a report made to the next meeting of the House of Delegates.

It is also the duty of the President-Elect to appoint a Nominating Committee, consisting of a delegate from each District. I therefore appoint, from the First District, Dr. E. H. Drake of Portland, Chairman; Second District, Dr. H. M. Howard of Rumford; Third District, Dr. Leon D. Herring of Winthrop; Fourth District, Dr. G. W. Soule of Rockland; Fifth District, Dr. M. A. Torrey of Ellsworth; Sixth District, Dr. H. C. Knowlton of Bangor.

The next item of business is the report of Council meetings. This report will be made to the House of Delegates by Dr. Ebbett of Houlton, the present Chairman of the Council.

(Dr. P. L. B. Ebbett then read his prepared report of Council meetings, held at Poland Spring, June 26 and 27, 1939; Bay View Farm, Belfast, August 6, 1939; Elmwood Hotel, Waterville, October 25 and 26, 1939, and of Council Business transacted by mail.)

CHAIRMAN FOSTER: You have heard the report of the Chairman of the Council. What is your pleasure?

DR. H. C. KNOWLTON of Bangor: I move that the report be accepted and placed on file.

This motion was duly seconded by several of the members present, and was carried.

CHAIRMAN FOSTER: There was a good deal of talk at the Council meetings, and a good deal of lengthy discussion, and I think we will have to thank in considerable measure our Assistant Secretary. The precise resume was very helpful.

After Dr. Ebbett catches his breath, we will ask him, as Chairman of the Council, to report to you and give to you the estimated budget for the Association for next year.

(Dr. Ebbett then read the estimated budget as approved by the Council:)

BUDGET, 1940-1941

President's Expenses .....	\$ 300.00
Salaries:	
Secretary-Treasurer .....	1,200.00
Assistant Secretary .....	1,500.00
Office Expenses, Secretary-Treasurer and Portland Office .....	850.00
Committees:	
Medical Advisory .....	650.00
Graduate Education .....	300.00
Other Committees .....	100.00
State Delegates and Council .....	200.00
Delegate, A. M. A. Annual Session .....	200.00
Annual Session .....	200.00
Clinical Session .....	200.00
Appropriation to JOURNAL (\$2,000.00):	
Editor's Salary .....	1,000.00
Other Journal Expenses .....	1,000.00
Total .....	\$7,700.00

DR. EBBETT: These expenses that I have read to you vary somewhat, so we can't drop down to just what certain costs were last year or the year before last. They vary up and down.

For instance, for the Medical Advisory Committee last year \$500 was appropriated and \$500 was spent. This, as you know, was a retainer for Mr. Locke, our legal representative. We have on that Committee eight men, of whom Dr. Carl Robinson of Portland is Chairman. They have to do a lot of work because there are a lot of medico-legal cases coming up, and they have always done it gratis. In other words, the members come from all parts of the State, and they have to travel to Portland, and so far they have always paid their own expenses. Your budget Committee doesn't feel that is fair. The work of this Committee is protecting each member of the Association. If a legal case necessitates meeting in Portland, and these men pay their own expenses, we feel this is not right. Therefore, we recommend adding \$150 to the amount usually estimated for this work. We suggest that you approve \$650 for the expense of the Medical Advisory Committee, allowing \$150 for expenses of traveling. If it isn't spent by the members of the Committee, we will still have the money.

On the Committee for Graduate Education, last year we spent \$131.66, but we had estimated an expenditure of \$500. We have cut this appropriation down this year to \$300.

For the Delegate to the A. M. A., we estimated \$250 last year, and we spent \$136.75. We have cut this appropriation to \$200 this year.

Last year, we allowed \$200 for the Annual Session, but we didn't spend anything; in fact, we came out \$24.00 ahead of the game. So we had a little saving there. However, in some previous



years, we have dropped behind as much as \$225. So we feel it is not safe to travel without a budget appropriation for the Annual Session, so we have estimated \$200 as usual.

Now, as to the Clinical Session, that is one of the things that perhaps the House of Delegates should consider. The advisability of continuing these Clinical Sessions was discussed considerably at Council meetings. The members do not attend them as they should. For the last couple of years, we have had only a little over one hundred members present.

The Society that we visited last year, Kennebec at Waterville, put considerable effort into giving us a good program. We feel that if the members want those programs put on by the respective societies, they can do it. It has to be in a clinical center. Then we, at least, ought to show our appreciation by attending. If the attendance is not good, we feel those sessions had better be cut out.

Now, up until the last few years, the Society that put on the Clinical Session has stood all the expense, but we didn't feel that was right, so last year, and I think the year before as well, the Society set aside a sum to spend on the Fall Clinical Session. Last year, we estimated \$200, of which \$152.75 was spent. This year, for the Fall Session, we advise the budgeting of the sum of \$200 again.

On the appropriation for the JOURNAL, last year we budgeted \$2,000, of which \$1,000 goes to the Editor's salary, and \$1,000 for the JOURNAL expenses. Last year, we expended \$1,596.93. Now, on the budget this year, we advise \$1,000 for the Editor's salary and \$1,000 for JOURNAL expenses, just the same as we estimated in 1939.

The total budget estimated last year was \$8,050. The budget this year, according to our estimate, amounts to \$7,700, approximately \$350 less than the estimate last year.

Now, are there any questions relative to any of these items?

DR. SAMUEL KAGAN of Augusta: I believe the Fall Clinic has had a little competition in the New England Post Graduate Assembly held in Massachusetts. I believe that probably is part of the answer to the dropping off of attendance. I wonder if you could tell us about the views that have been expressed on the Fall Clinic.

DR. EBBETT: There is also another meeting that comes about the same time that many of the men want to go to. In other words, they both come in October. We have usually held ours the last week in October or thereabouts. Usually, we plan the date so that if the members want to do so, they can go to one of the football games; we would have our meeting on Friday, and they could go to the game on Saturday, if they wanted to do that.

Now, whether it would be advisable to have these meetings later, when we wouldn't conflict with anything else, or whether it would be advisable to have the meetings earlier, is a question. If we put it much earlier, it brings us pretty close to our June session. In other words, in September, when the weather would be better, and when the roads would be better, we might draw a larger crowd, but on the other hand, it would be pretty close to this meeting. Then again, if we hold it in November, we are liable to strike even worse weather than we do in October. We can't tell about that. It is a debatable question.

It seems to me that if our attendance doesn't improve, it is rather foolish to ask any Society to go to the work of putting on these meetings. I must say, however, that those who have been

missing them are missing a treat. I have enjoyed every one of them. I think you all would, if you would attend them.

I can say that Bangor has cordially invited us over there this Fall, and I know they have a wonderful program in view. I have talked with Dr. Craig and some of the others, and I know they have a treat in store for us.

CHAIRMAN FOSTER: This is your money that is being spent, Gentlemen, and if there are any items on the budget, which are not clearly understood, now is the time to question them.

Are there any questions?

DR. KNOWLTON: I move the adoption of the budget.

*This motion* was duly seconded by Dr. Smith, and was carried.

CHAIRMAN FOSTER: I declare the vote carried. Your budget for next year is set down for \$7,700.

I should like to say here that the Council considered the Clinical meetings at length and, as Dr. Ebbett said, two years ago, the Council decided that the Clinical meetings would continue and as the expense increased, the State Society ought to bear the expense; this was so voted, and this year that appropriation appears.

DR. H. E. SMALL of Fort Fairfield: Is discussion of the Clinical Session open now? It has been suggested that we cut down the two days to a one-day session.

CHAIRMAN FOSTER: We are going to bring that up later, and we will amplify your views at that time.

The Council Chairman has another duty, a pleasant duty, to perform, and that is to read the names of the men who have been in practice fifty years in their various counties and have been nominated by their counties as full-fledged members of this Association, with dues paid up, and entitled to the Fifty-Year Medal.

DR. EBBETT: The names of these men are as follows:

Henry H. Brock, M. D., of Portland, Cumberland County Medical Society, graduated from Bowdoin in 1890.

Frederick B. Adams, M. D., Rockland, Knox County Medical Society, graduated from New York University Medical College in 1890.

Edward E. Shapleigh, M. D., Kittery, York County Society, graduated from Bowdoin in 1890.

These names were approved by the Council.

A MEMBER: Does that require the vote of the House of Delegates?

CHAIRMAN FOSTER: It requires the vote of the County Medical Society, and the Council approves that.

A MEMBER: Then we do not need to do anything on that, do we?

CHAIRMAN FOSTER: You may express your approval.

All those in favor of the action of the Council will please signify by saying "aye."

*There was* a chorus of "ayes," and the action of the Council in this matter was approved.

CHAIRMAN FOSTER: At this time, we are going to hear from the Delegates to the various State Societies. First, I will call on Dr. Wedgewood Webber, of Lewiston, who represented our Society at the Connecticut meeting.

DR. M. S. F. GREENE of Lewiston: He may be here later, but I am sure that I can say that he attended and that he had an excellent time and



was well received. I hope he will be here in person to report later.

CHAIRMAN FOSTER: The delegate to the New Hampshire Medical Society meeting was Dr. William T. Rowe of Rumford, and perhaps we can hear from him at this time.

DR. H. M. HOWARD of Rumford: Dr. Rowe was unable to get here today. He did attend the meeting and had an enjoyable time, and in one of our local get-togethers, gave us a nice description of the meeting that he attended in New Hampshire.

CHAIRMAN FOSTER: Dr. Torrey of Elsworth attended the Rhode Island meeting. Dr. Torrey, can you report to us on your visit there?

DR. M. A. TORREY: Mr. Speaker and Gentlemen. The Rhode Island meeting was held June 5th and 6th in Providence. The meetings are run in a measure much the same as ours. Of the two days of the meetings, the afternoons are given over to papers and discussions, and the forenoons are given over to clinics, not dry clinics, but clinics actually held in the hospitals.

I had an experience similar to Dr. Ebbett's. The Wednesday morning clinics were held at the Memorial Hospital in Pawtucket. If you know anything about Providence, you will know that finding your way from, let me say, the Providence Biltmore to the Memorial Hospital in Pawtucket is much worse than coming from Houlton to Belfast. I happened to take the wrong route, and by the time I got there, the Clinical sessions were all over.

The other Clinical Sessions were held in three hospitals in Providence, the Lying-In Hospital, the Butler Hospital and the Memorial Hospital, with a program that certainly would fulfill the wishes of any individual there. You would simply have to make your choice and go to that one.

The afternoon sessions were held at the Providence Memorial Library, a very splendid structure that is given over to the Medical Society of the State. There is not only a Library, but there is also an Auditorium, in which they hold practically all of their meetings.

The first afternoon, unlike our weather here, it was terrifically hot. Dr. Kingman, who was presiding, perspired so freely on the rostrum that he finally suggested we shed coats and vests, which we did, and from then on we were reasonably comfortable.

We had the pleasure of listening to Dr. Joslin, who, in a rather informal sort of an address and in his characteristic manner, talked about some of the anticipated advances in the treatment of diabetes to come.

The Superintendent of the Providence State Hospital was there and gave a rather interesting discussion of the convulsive state. He advocated some new sidelights on the thing that certainly were brand new to me, and I think they were brand new to a great many men who sat there and listened to him. If Dr. Fitzpatrick is on the right road, he may know a lot of things that we don't know too much about now.

The meetings, in general, were well attended, although it was hard to determine that unless you watched it a little bit. The meetings would begin with perhaps fifty members present. In the course of three hours, I venture that that number would change at least three times, as men came in and went out from the surrounding city.

About half of the physicians in the State of Rhode Island are concentrated in the two cities of Providence and Pawtucket. Those men were all carrying on their practice, and were sneaking

away for an hour or so as they could, and as they came and went out, we had a sort of rotating session each day. It wasn't true of the clinical sessions, but it was true of the afternoon sessions.

The banquet was held at the Popham Club, at which we were served a shore dinner of endless courses, followed by an address by a clergyman. It was one of the finest things I ever listened to. Certainly, it wasn't medical, but it was extremely interesting. He had just returned from Finland previous to the Russian invasion, and gave us a first-hand description of Finland and what it was before and what it might be now. Everybody, it seemed to me, was extremely interested in the thing.

This was my first trip to another medical society as a delegate. Dr. Wells, Secretary of the Rhode Island Society, although an extremely busy man, not only with the Society, of which he is, of course, like a great many other Secretaries, the main-spring, yet he took me under his wing and showed me some of the intricate windings of the City of Providence, which I promptly forgot; he saw to it that I got from one place to another at the proper time after he found I was there, and he made it generally a very enjoyable occasion for me.

I did see one thing that perhaps the men in this Society would be interested in, or will be interested in a little later. One of the younger men of the Providence Medical Society has invented a new type of blood pressure cuff. It is one of the most ingenious things I have ever seen. All you do is to take the bag out of your case and transfer it to this thing. It is a leather gadget, which you slap on, in the twinkling of an eye, and proceed to pump. When it is all over, you grab one end and pull, and the whole thing comes off. They were running time trials, one afternoon, something like thirty seconds from start to finish, from the time of unpacking to complete packing of it.

Dr. Pratt hoped to have that thing up here at this meeting. He wrote me about it and I referred the letter to Dr. Carter, but I don't know what action was taken. He only succeeded in getting twenty-five made down there, but I happened to be fortunate enough to get one of them. I foolishly came off and left it at home. It is a tricky little thing, and I think a lot of men are going to be interested in it.

I wish, at this time, to extend my thanks to the State Society for giving me the privilege of going to Providence. (Applause.)

CHAIRMAN FOSTER: Thank you, Doctor, for such an interesting report. I think, too, that it is a privilege and a pleasure to attend the meetings of a Society of one of our sister states.

The representative to the Vermont meeting was Dr. Harold E. Small of Fort Fairfield, and we are ready to listen to his report now.

DR. HAROLD E. SMALL: I was very happy to have the opportunity to go to Vermont, as representative of the Maine Medical Association. The Vermont meeting was held on October 5th and 6th in the City of Burlington, at the Hotel Vermont; that is, the headquarters for the convention were at the Hotel Vermont, but the business sessions were at the Hotel Van Ness, across the street.

It is a great privilege, and a happy one, for me to go back to my college town and meet Professors and a few classmates whom I hadn't seen for a great many years. I was very graciously received and had a most enjoyable time.

I think one of the highlights of the meeting was an address or a talk by John Irving of New York City on "Early Diagnosis of Tumors of the Breast."



He brought out the importance of early diagnosis and methods which are to be used.

Another paper, or rather a symposium, was by Dr. Mahan of New York on "Obstetrics." This took up all of one forenoon.

The Vermont Society holds their sessions for only a day and a half. This symposium on "Obstetrics" took place on the forenoon of the last day. There developed quite a discussion in regard to treatment and diagnosis and also the difficulties of Cæsareans and the hemorrhages that follow, and I was particularly interested in that part of it, because I have been in difficulties myself, and I always hate to get hemorrhage from the cervical portion and try to control them with small packs and other medication.

On Monday evening, there was an address by the President-Elect of the A. M. A., Dr. Van Etten, on the various aspects of this discussion we are having in Washington over the A. M. A. and their law suit. It was very interesting.

Following that, there was music by a quartette from Boston, which was most excellent, I can assure you. After that, there was a magician who did some very fine sleight of hand work, and his performance was most interesting to everybody, including the ladies, as he showed them how to play trick bridge and a few other things; he told them not to have him as partner.

I want to thank you very much for sending me as a delegate to the Vermont meeting. (Applause.)

CHAIRMAN FOSTER: Your delegate to the Massachusetts Society meeting was your President-Elect, who was most courteously received. As a matter of fact, I received a letter from the vigorous and charming Secretary of the Massachusetts Society to be sure to be present. The letter enclosed a ticket to the banquet, and every courtesy was extended to me as your delegate.

The meetings were held at the Copley Plaza on May 21st and 22nd, I think it was. The commercial exhibit was in the large ballroom on the right as you go in from Dartmouth Street; there was a tremendous commercial exhibit, and the meetings were held in the room on the left.

They have adopted a system of general meetings for the four sessions. They had a symposium Tuesday morning and Tuesday afternoon, the banquet Tuesday night, a symposium on Wednesday morning and Wednesday afternoon, with a group of speakers on the same subject, and then the subject was summed up by an eminent authority.

Dr. Parran summed up the discussion on venereal diseases. Dr. Perrin Long was the highlight of the meeting, and he summed up chemotherapy. He is an extremely interesting and capable man. He had a few notes in one hand, to which he never referred, as far as I could tell, but he covered the subject thoroughly from beginning to end. Of course, he has lived in chemotherapy, and he certainly is master of the subject. He gave the impression, very distinctly, not to be afraid to use sulfapyridine, sulfanilamide, sulphathiazol. Don't be afraid to use them. I gathered, from listening to the symposium, that the doctors are a little bit afraid to give it, and the patients can't get it fast enough. I have forgotten how many tons he said had been used. Of course, he didn't mean to use it indiscriminately. But he certainly gave the impression that it is a reasonably safe drug, and if one kept his eyes open for jaundice, anemia, red blood in the urine, it could be safely given. Fifty per cent could be given to office patients or patients in the home. He was, of course, familiar with it and not the least bit afraid of it. He held the audience for a long time, and certainly gave encouragement in the use of these drugs.

Dr. Francis Blake, one of our speakers last year, spoke about pneumonia, and he said he couldn't show there was any great difference between the use of sulfapyridine and sulfanilamide; he thought they were both safe and efficient, and the results were extremely satisfactory.

They had the banquet the first night. Dr. Parran said a few words about the gravity of the war situation. Then the meeting adjourned to the ballroom and they had an annual oration. They had a fine evening.

The next day they had a luncheon, and then the meetings adjourned on the afternoon of the second day.

It was interesting to note that they didn't have any conference meetings. They do have a noon luncheon the first day, at which different groups discuss particular subjects. For instance, a medical group will discuss medical subjects; a pediatric group will discuss their field, and the same is true of surgery. Notice is given beforehand about those group meetings, and they are held at the different hotels in the neighborhood of the Copley Plaza Hotel. Tickets are issued for the luncheons, and certain subjects are discussed. Otherwise, the four sessions are devoted to a general meeting type.

It was a pleasure to attend these meetings, and I certainly appreciated the opportunity to go to Boston.

A MEMBER: At those luncheons, do they have a leader to discuss the particular subject first, that is, a designated leader, who knows what he is going to start with, and then gets the other fellows going, or does he have a paper?

CHAIRMAN FOSTER: They have a designated leader, long ahead of time, with an assistant to help him, on the program, and he starts the discussion.

Are there any other questions you Gentlemen would like to ask about the various State meetings? If not, we shall go on with our next item of business.

We are now going to hear from the Delegate to the A. M. A. recently held in New York, the man who has represented us so well for the last few years, Dr. Ellingwood of Rockland.

(Dr. Ellingwood read his prepared report on the A. M. A. meeting in New York.)\*

CHAIRMAN FOSTER: Are there any questions about the meeting of the A. M. A.?

DR. KNOWLTON: Did I understand Dr. Ellingwood to say the Association was being sued for \$5,000,000?

DR. ELLINGWOOD: Yes, that includes several indictments. Dr. Brickley has a suit against us for \$250,000; a pharmaceutical house has brought suit for \$3,000,000; another individual, who is a doctor, has brought suit for \$1,000,000 for libel. There are three libel suits, altogether. On top of that, we have the suit of the government, and I don't know how much that is.

CHAIRMAN FOSTER: Are there any further questions? If not, we will go on to the matter of hearing reports of the Standing Committees, which were not published in the JOURNAL. The June issue of the JOURNAL carries the reports of the Standing Committees, unless there is some reason for not carrying them.

I shall now call upon the Chairman of the Committee on Medical Education and Hospitals. Is Dr. Leighton here?

(There was no response.)

\* This report will be published in an early issue of the Journal.



Is the Committee on Social Hygiene ready to report? Is Dr. Merrill of Bangor here?

(There was no response.)

Dr. George L. Pratt is Chairman of the Legislative Committee, but he feels that there isn't anything to report, because there was no Legislature in session last year and therefore there were no matters to come before the Legislative Committee.

Do you wish to add anything, Dr. Pratt?

DR. GEORGE L. PRATT of Farmington: No, that is all I would have to say about this matter.

CHAIRMAN FOSTER: Now we have the reports of the special committees. Dr. B. L. Bryant was Chairman of the Committee on Nursing Affairs, but Dr. Bryant died, and Dr. Brown reports that they have not had a meeting of the Committee during the past year.

Dr. George Young of Skowhegan is Chairman of the Tuberculosis Committee, but I understand there is no report from that Committee.

Dr. Harry Butler of Bangor is Chairman of the Committee on the Prevention and Amelioration of Deafness. Dr. Butler sends the following letter to Dr. Carter:

"I will be unable to go to Rangeley before Monday, June 24th, but I am sending this in lieu of presenting a report of the Committee at the first meeting of the House of Delegates. The Chairman of the Committee conducted a Hard-of-Hearing Clinic, as has been customary in other Years, at Millinocket. This seems to be the extent of the work the past year, beyond educational talks wherever possible.

"I am wondering, after a talk with Dr. Hill, whether it might not be wise to discontinue the Committee as such, of which I am Chairman, delegating the work of spreading the gospel to the Committee on Graduate Education.

"Very sincerely yours,

"Harry Butler, M. D."

CHAIRMAN FOSTER: Dr. Butler has made this report through this letter. Do I hear any motion regarding his suggestion that the work be carried on by the Committee on Medical Education? Dr. Holt, are you on the Committee on Graduate Education? Dr. Butler suggests that the Committee for the Amelioration of Deafness be discharged and merged with the Committee on Graduate Education.

DR. E. E. HOLT of Portland: I don't know as I can answer for the Committee. That has never been brought before the Committee, to my knowledge. I don't know whether that would come, strictly, within the province of that Committee or not.

DR. W. E. KERSHNER of Bath: I would suggest that the Committee on Graduate Education is for physician training, and this particular thing applies to the relief of deafness and the teaching of the lay public of those things which have to do with deafness and how they may be relieved. I don't see that the two Committees would have anything in common, do you, Dr. Holt?

DR. HOLT: I should not think so.

DR. KERSHNER: You are dealing with the training of physicians on this Committee, and they are dealing with lay contacts.

DR. HOLT: As far as I know, we have had no contact with the lay people in our work.

CHAIRMAN FOSTER: We will postpone further discussion until Dr. Butler comes and see if we understand the intent of his letter.

We will go on to the Committee on Investigation of Collection Agencies. Dr. E. W. Gehring of Port-

land is Chairman of that committee, but he resigned; he sent in his resignation as Chairman of that Committee, and he suggested that the Committee be discontinued. I have a letter from Dr. Gehring regarding this matter, which I shall read.

"Dear Doctor Carter

The Committee on Investigation of Collection Agencies has nothing to report.

Dr. Pratt, in the September, 1939, issue of the JOURNAL, ordered printed an old president's page of mine (1934) entitled "Stop, Look and Listen." That is our admonition today and every day. At this time, I beg herewith to submit my resignation as a member of the Committee on Investigation of Collection Agencies, the same to take effect at the annual session of the State Medical Association in June, 1940.

Very sincerely yours,

E. W. Gehring."

CHAIRMAN FOSTER: What is your wish in this matter?

DR. GEORGE L. PRATT of Farmington: I think that Dr. Gehring has been an extremely efficient man, investigating these agencies, and he knows a good deal more about them than any of the rest of us. I think we should refuse to accept his resignation. I think he will continue, if we put it up to him.

CHAIRMAN FOSTER: Do you move that the resignation be not accepted?

DR. PRATT: Yes, I move that the resignation of Dr. Gehring as Chairman of the Committee on Investigation of Collection Agencies be not accepted, that he be notified that his resignation has been received and not accepted, and that he be asked to continue.

*This motion* was duly seconded by several of the members present, and was carried, by a hand vote.

CHAIRMAN FOSTER: That is the end of the Committee reports. I do not believe I asked for acceptance of the report of the Delegate to the A. M. A.

DR. HOLT: I move that the report of the Delegate to the A. M. A. be accepted.

*This motion* was duly seconded by Dr. Ebbett and other members present, and was carried.

CHAIRMAN FOSTER: That is the routine business. Now, we come to new business, and under new business, we have a letter from Penobscot County Medical Society, inviting us to hold a Clinical Session in Bangor. I will ask Dr. Carter to read the letter to you.

SECRETARY CARTER: This letter is dated February 26, 1940. It includes a report of the County meeting. Then the letter says that the Penobscot County Medical Society voted to invite the group to come to Bangor for the Fall Clinical Sessions, if such are to be held. They are interested to know when the decision is to be made relative to holding these sessions, as they understand there is considerable doubt about the wisdom of holding these Fall meetings. They will be glad to hear from us as soon as we can give them definite information. This letter is signed by Forrest B. Ames, M. D.

DR. L. A. SWEATT of Auburn: I haven't anything to offer, but I just want to say that was brought up at one of our meetings. I understood that the Secretary had had a letter written to him relative to sending the session down there for a day. When the session is for two days, a man has to choose; perhaps he can go only for one day, and the result is that sometimes he chooses neither; he doesn't go at all. So it was thought in our meetings that



perhaps if we had a one-day session, it might be better.

CHAIRMAN FOSTER: We would like a full discussion on this matter, Gentlemen.

DR. PRATT: I would like to say that I brought this matter up in nearly all of the County Societies over the State. We all know that the attendance has not been as good as it should be, but the sentiment seemed to be almost unanimous that we should continue these fall meetings, whether they be for one day or two days. In fact, this one-day idea, I hadn't thought of at all. But in any event, I think the sentiment is that we should continue the meetings over the State.

DR. KNOWLTON: Of course, if you want to make a change or try something different, this might be a good year to do it. We are so situated in Bangor as to have just one center for these meetings. Portland has two or three, and Lewiston has a couple and Waterville has a couple, but we have only one. So, if we want to try a one-day session, morning, afternoon and evening, this would be as good a time as any to try it out, because we will have to run our meetings in the same place on both days, if we have a two-day session—not that we are averse to doing that or have even discussed it, because we haven't.

DR. TORREY: Since Dr. Pratt brought this matter up at our County Society meeting last fall, there has been considerable discussion amongst ourselves about the Clinical Session. The thing that we are up against, particularly, in our County, is this. When the Fall Clinical Session is held in Portland, let us say, on a Thursday and Friday, we have to figure not only on Thursday and Friday, but also Wednesday afternoon and Saturday forenoon, with the exception of Dr. Weymouth of Bar Harbor, who drives to Portland in two hours! But, the rest of us can't do that; so we have to figure on the extra half day. In other words, it is a matter of time, from one end of the State to the other, in that particular instance. Of course, with the meeting in Bangor, that will fit us beautifully, because we are only twenty-five miles away.

This thought has come to some of us. Would it be wiser to attempt to run the Fall Clinical Sessions in one locality that covers the entire State, or would sectional sessions be more advisable, in sections where it isn't so difficult for men to get there, having, possibly, not quite so pretentious a session and possibly a one-day session instead of the two days, but more of them in regions where they are accessible to everybody.

CHAIRMAN FOSTER: Gentlemen, here is an opportunity for discussion. We have this cordial invitation to carry on our Fall Clinical Session in the Queen City of Bangor, of which none is better.

DR. KERSHNER: Mr. Chairman, I would suggest that the Chair appoint a Committee at the proper time to study the possibility of regional meetings, and to accept Bangor's proposal this year. However, I think that this regional meeting business should be given study by a separate Committee.

DR. E. H. DRAKE, Portland: I think we all realize what a lot of work these Clinical Sessions mean, and for that reason, it seems to me that this Regional Meeting business is out. If we can't get sufficient attendance from the whole State, we certainly can't get it, otherwise. Certainly, we can't get a group of men to arrange a program and do a lot of work, only to get a handful of men to attend. We have regional meetings now; at the

time our Regional Societies meet, we have our Regional meetings.

While discussing this problem it might be wise to consider one other proposition, and that is, the possibility of going back to having one medical meeting a year, combining our nice, social meeting with a clinical meeting, too, holding it in or about some medical center, where hospitals are available, and where there is still a chance to play golf and thus we will get it all over in one swoop.

CHAIRMAN FOSTER: Dr. Drake has brought up a question which has been in the minds of some of the members of this Society. We are still conscious of Bangor's generosity, and this discussion doesn't mean to say that we don't appreciate the invitation; it seems like a good time to discuss the matter fully, however.

DR. KERSHNER: May I have the floor again, please? The conception of the Clinical Session was based upon the reports from a considerable number of men all over the State that they weren't interested in the type of session we had at the Annual Meetings, because they had no preview of the papers, and it was just that they were given, for the most part, by eminent men, and they weren't in a position to discuss them, and while they could have a good time socially, they didn't get anything out of it, practically.

Now, the Clinical Session was founded in order to bring in a good number of men who were not interested, particularly in the Annual Meeting. But, I am sorry to say that the same men who come here come to the Clinical Sessions, and I don't know that any more do come.

CHAIRMAN FOSTER: Dr. Drake, of course, speaks of the meetings which were held formerly in Portland, Bangor and Lewiston, the cities where the hospitals are, and where Clinical Sessions could be held and scientific papers could be read, instead of the resort meeting, combining the scientific meeting and the clinical meeting into one meeting.

I think that a discussion of this kind is helpful; it is enlightening to get the views of many of the members.

DR. FRANK A. SMITH, Cumberland Mills: It seems to me that combining those two meetings would be having too big a meeting at one time, and I think that if there is one thing on earth that the medical profession needs, it is to get some social life and to know each other better. I would be very sorry to see too much put into one session. I think that we get as much as we can handle at this session, or this Annual Meeting, as it is run at the present time, and at the same time, we have a delightful time. I think that the doctors' wives ought to be considered in this. I know that my wife has a tremendous job on her hands, in this game that I am in, and perhaps a few others who are in general practice have the same feeling about it. I know that my wife considers this the finest thing she attends during the year, Rotary or any other service club to the contrary notwithstanding.

I, for one, would be very loathe to see a change made in the tenor of these Annual Meetings.

CHAIRMAN FOSTER: Is there any further discussion, Gentlemen?

DR. KNOWLTON: I should like to second that. From our point of view, there is too much medicine projected into some of these meetings. I don't think there is anything that is better for us to do than to get together socially. In Bangor, we are kind of in a state of change, with reference to the hospital, and we don't get together and talk



as much as we did formerly, and I think it is bad for us. This holds true all over the State, just as well as it does in Bangor. And when you don't see people for a while, you begin to think there is something queer about them; especially if you are in competition with them, you keep at a distance.

I believe we could even make this spring meeting more of a social meeting, and then do our clinical work in the fall. So, you had better come back to Bangor to finish off; you started there, you know. We had our first meeting of this Fall Clinical Session in February, and we did a lot of work to get ready for you.

Let's have one more crack at it in the fall, and not too late in the fall; perhaps many of the boys will take pity on us and come.

Let's leave this spring meeting as it is—only I think it would be nice to cut out so much medicine!

CHAIRMAN FOSTER: I really haven't any idea, but I think that this Society will go to Bangor in large numbers. I also want to express the view that Dr. Drake is not unsocial.

DR. KNOWLTON: I didn't mean that.

DR. DRAKE: I attended that meeting in Bangor.

DR. KERSHNER: I was going to say that Dr. Knowlton was so busy entertaining that he didn't recognize Dr. Drake.

CHAIRMAN FOSTER: I also wish to say that Dr. Smith speaks from the shoulder; he works hard and enjoys these meetings.

Now, is there any further discussion of this invitation to go to Bangor for our Fall Clinical Session?

If not, do I hear a motion?

DR. DRAKE: I move that we accept the invitation of Bangor, to hold our Fall Clinical Session there.

*This motion* was duly seconded by Dr. Smith, Dr. Ebbett and other members present.

DR. KAGAN: Do you care to have an expression of opinion as to a one-day or a two-day session?

CHAIRMAN FOSTER: Let us dispose of the invitation first, Doctor.

DR. KAGAN: But the invitation will probably hinge on the length of time of the meeting.

CHAIRMAN FOSTER: I guess it is proper to discuss it. Before voting, Dr. Kagan would like to discuss the matter of whether or not we should have a one-day meeting or a two-day meeting. Now, if you bring that up, you will have to amend the motion.

DR. KAGAN: I don't care whether you vote on it or not, but I think the men ought to discuss it. It is nice to say what the profession should do, but the fact is that the men are not doing it. We can theorize. We are having clinics and sessions in practically all the large centers. They are putting on good clinical days in Lewiston and in Portland, too; but, they have a lot of difficulty in getting the profession to attend these meetings.

Now, there is some reason why the men don't care for it. There is an increasing interest in the New England Post Graduate Assembly at Boston, and I can say that in and around Augusta and Kennebec County, there is an increasingly larger number of men who have planned to attend and

who are going to attend that meeting, in preference to the State meeting.

If the State meeting were held one day, where they can go and devote a day to it, and get it over with, then I think that perhaps more men would be willing to attend.

It is difficult to try to take in more than one day, and still cover your own work and other things.

I think we must not carry too much of an idea that we are going to change, in general, and reform the profession; we cannot do that.

CHAIRMAN FOSTER: Thank you, Dr. Kagan. Is there any further discussion? Are you ready for the question?

(The question was then called for.)

All those in favor of the motion to accept the invitation to go to Bangor for our Fall Clinical meeting will please signify by raising hands. Those who are opposed?

*There was* no opposition, and the motion was unanimously carried.

CHAIRMAN FOSTER: I declare it an unanimous vote that we go to Bangor, and the time of the meeting will be decided by the Scientific Committee, in coöperation with the local Committee at Bangor. That, generally, is the technique that has been used in the past, and, if it meets with your approval, it will be arranged this year in the same manner, taking into consideration the remarks that have been made here today.

Is there any other new business to come before the meeting, Gentlemen?

DR. SMITH: Is the matter of that communication from Colonel Stoddard going to be brought up, with reference to patients being sent to the Veterans' Hospital, not in proper shape to travel?

CHAIRMAN FOSTER: That was brought before the various County Societies, and referred to the Council, wasn't it? Can you enlighten us on the status of that correspondence and the communications, Mr. Secretary?

SECRETARY CARTER: That matter was brought up at the local County Societies, and the thing was adjusted satisfactorily to Col. Stoddard. I have been in touch with him two or three times, and he has no complaints at all, as far as he is concerned.

CHAIRMAN FOSTER: Dr. Carter has called my attention to the fact that the terms of Dr. Bliss and Dr. Ebbett expire at this meeting. The delegations from the Fifth and Sixth Districts may have a caucus between now and the next meeting and bring in the name of a candidate for the Council from the Fifth District and the Sixth District.

The next meeting of the House of Delegates will be held directly after the general session tomorrow afternoon. The general sessions will be held in the Golf Club Building, and the meeting of the House of Delegates will follow the general session meeting, at the Golf Club Building.

If there is no further business to come before this meeting, a motion is in order for adjournment.

DR. KNOWLTON: I move that we adjourn.

*This motion* was duly seconded by several of the members present, and was carried.

(Whereupon, the First Meeting of the House of Delegates was adjourned at 6.15 P. M.)

## SECOND MEETING OF THE HOUSE OF DELEGATES, JUNE 24, 1940

The Second Session of the House of Delegates of the Maine Medical Association convened on Monday, June 24, 1940, at 5.15 o'clock in the afternoon, at the Golf Club Building of the Rangeley Lake House, Rangeley Lakes, Maine, with Dr. Thomas A. Foster of Portland, President-Elect of the Maine Medical Association, presiding.

CHAIRMAN FOSTER: The meeting of the House of Delegates will please come to order.

The first order of business is the roll call by the Secretary.

(The Secretary called the roll and the following delegates responded):

Androscoggin County: D. F. D. Russell, Leeds; M. S. F. Greene, Lewiston.

Aroostook County: H. E. Small, Fort Fairfield.

Cumberland County: F. A. Smith, Cumberland Mills; E. H. Drake, F. A. Ferguson, and E. A. Greco of Portland.

Franklin County: Harry Brinkman, Wilton.

Hancock County: M. A. Torrey, Ellsworth.

Kennebec County: Howard F. Hill, Waterville; Leon D. Herring, Winthrop.

Knox County: James Carswell, Camden.

Oxford County: E. M. McCarty, Rumford.

Penobscot County: Forrest B. Ames, and H. C. Knowlton, Bangor.

Piscataquis County: F. J. Pritham, Greenville Junction.

Sagadahoc County: W. E. Kershner, Bath.

Somerset County: R. P. Laney, Skowhegan.

CHAIRMAN FOSTER: Eighteen members being present, and ten being a quorum, I declare the meeting legal.

The first business is the report of the Nominating Committee. The Chairman of the Nominating Committee is Dr. Drake of Portland. This Committee nominates the Standing Committees, but not the Special Committees.

DR. E. H. DRAKE of Portland: Your Committee wishes to report the following slate of nominations:

(Dr. Drake read the list of nominations for the Standing Committee.)\*

CHAIRMAN FOSTER: I wish to thank the Chairman and the Committee for their report.

We have this report of the Nominating Committee, Gentlemen. What is the wish of this House of Delegates?

DR. GEORGE L. PRATT of Farmington: I move that the report of the Nominating Committee be accepted, and that the Secretary cast one ballot for the nominees, as given by the Nominating Committee.

*This motion* was duly seconded by Dr. Kershner and other members present, and was carried.

CHAIRMAN FOSTER: And I declare those nominees duly elected for the respective Committees, representing your slate for the present year.

The next order of business is the report of the Reference Committee. Do the members of the Reference Committee have a report at this time? The Chairman is not here at present, but he may be here shortly, so I shall return to that item of business later.

The next order of business is the election of Councilors from the Fifth and Sixth Districts. It

is the custom for the delegates from those Districts to meet and caucus their districts for a candidate, and present their candidate to the House of Delegates for election. Candidates may now be nominated for the Fifth District.

DR. M. A. TORREY of Ellsworth: Down in our section, we have an unwritten law that a Councilor on one occasion shall come from Hancock and the next time from Washington. We had the Councilor from Hancock the last term, so that theoretically, at any rate, it is Washington's turn. I see there is no one here from Washington County, but I expect they are just delayed. If it is possible, I should like to ask that this election be delayed until later on in the meeting, in order to see if some of those gentlemen will come over here to the meeting, because perhaps they will have some candidates to suggest.

CHAIRMAN FOSTER: Sometimes, we need to be a little more like Hitler, but we will give you three or four minutes or so.

DR. F. G. PRITHAM of Greenville Junction: We have a three-cornered triangle up in our section. It is Piscataquis' turn to turn about, and I take pleasure in nominating Norman H. Nickerson of Greenville for Councilor from the Sixth District.

*This motion* was duly seconded by Dr. Knowlton and other members present, and was carried.

CHAIRMAN FOSTER: I declare Dr. Nickerson duly elected as Councilor from the Sixth District.

We have now to take up invitations for the 1941 Annual Session. I am going to ask the Secretary if he has any report to make on invitations for the 1941 Annual Session.

SECRETARY CARTER: Mr. Chairman, we have two invitations. We have an invitation from York Harbor, where we were several years ago, and we also have a second invitation from Poland Spring; the same rates would prevail at Poland Spring that we had last year.

DR. W. E. KERSHNER of Bath: Mr. Chairman, I move that this matter be left to the Council, in their wisdom, to decide the date and the place of the meeting.

*This motion* was duly seconded by several of the members present and was carried.

CHAIRMAN FOSTER: Now, we have some unfinished business. We have some reports of some of the Special Committees. These Special Committees are named as the occasion arises to investigate and report on certain conditions. After their report is rendered, it is appropriate for the delegates to recommend the discharge or the continuation of that particular Committee.

Before I come to the Special Committee reports, I am going to ask for a report from one of the Standing Committees. These Standing Committees, as you know, are nominated by the Committee on Nominations and elected by the House of Delegates. One of these Standing Committees has not reported, and that is the Committee on Social Hygiene, of which Dr. E. S. Merrill of Bangor is Chairman. Is he here, and has he any report?

(There was no response.)

He is not here. So we will go on with the reports of the Special Committees. First, we will have a report of the Tuberculosis Committee, of which Dr. George Young of Skowhegan is Chairman. Is he here and does he wish to make any report?

(There was no response.)

Now, we shall have the reports of the delegates who did not report at the first meeting. Dr. Webber of Lewiston represented us at the Con-

\* Published in the July, 1940, issue of the Journal, page 207.



necticut meeting, and we are now ready to receive his report.

DR. W. P. WEBBER of Lewiston: Mr. Chairman and Delegates. I was glad to have the opportunity of attending the 148th Annual Meeting of the Connecticut Medical Society at the Hotel Bond in Hartford, Connecticut, on May 22 and 23. The meeting was better attended than ever before in its history; between four and five hundred men were present. This was attributed, possibly, to two causes; first, the prevalent public discussion of medical affairs, and secondly, the meeting was only two days, instead of three days.

The meeting was run a great deal as this one has been conducted, having a general assembly of the whole group on each of the two mornings. The afternoon sessions were broken up for the specialty groups. In the general sessions, there was an adequate amplifying system in use. In the panel discussions, there were men from New York State and Massachusetts and also from New York City. The papers were limited very rigidly to fifteen minutes, and there were six or seven papers on each of the mornings, with a complete discussion by the panel at the end, summarizing the work of the morning.

The first day took up cardio-renal-vascular disease, and the second day gastro-intestinal diseases were discussed. There was an attempt made to keep these discussions on the basis of the general practitioner, taking up the simple things, and the discussions included even neurology and obstetrical problems in those two fields.

The banquet Wednesday night was very well attended; Haven Emerson of New York was the principal speaker, and his subject was, "What our People Really Need for Help."

I wish to thank the Association for the opportunity to attend this meeting. It was most enjoyable. [Applause]

CHAIRMAN FOSTER: It is interesting for the House of Delegates to have these reports from other Societies, especially for the suggestions that they bring back, because they are helpful to the various Committees we have in this organization.

Is there any further business to come before the meeting?

Now, it seems that the only member we had from the Fifth District has disappeared.

I see here some former delegates and officers; we are very glad to welcome them and extend the privileges of the floor.

If anybody wants to make any comment on the prerogative of the Chair to discharge the Special Committees which the Chair considers to be no longer serving a useful purpose, now is the time to make it. Is there any objection to that, Mr. Secretary?

SECRETARY CARTER: Not as far as I know.

CHAIRMAN FOSTER: We are now waiting upon the nomination of the Fifth District for a Councilor.

DR. TORREY: I have not been able to contact any of the Washington County men, but perhaps Dr. Bliss knows something about what sort of conclusion they arrived at.

CHAIRMAN FOSTER: It is the duty of the Councilor from that district to smooth out all difficulties, be a peacemaker and bring harmony.

DR. R. V. N. BLISS of Bluehill: There has been no war; therefore, I suppose there is no peace. Is it proper for me to make a nomination for the Council from the Fifth District?

CHAIRMAN FOSTER: We will have to refer to the by-laws, unless Dr. Plummer can give us a ruling off-hand.

DR. BLISS: Dr. Torrey is the delegate from Hancock County. Is the delegate from Washington County present?

CHAIRMAN FOSTER: Dr. Bates is the delegate from Washington County, and he doesn't seem to be here.

DR. BLISS: If it is permissible, I should like to make a nomination, or perhaps make a suggestion.

DR. PRATT: I think Dr. Bliss is here as a member of the House of Delegates, because he is a Councilor.

DR. TORREY: If I may have the floor, and if Dr. Bliss will yield the floor—

DR. BLISS: I yield the floor.

DR. TORREY: May I place in nomination for reelection, Dr. Bliss, as Councilor from the Fifth District.

This nomination was duly seconded by several of the members present.

DR. BLISS: That this highly honorable and highly responsible position should go begging is rather extreme. I feel that in the coming three years, there will be questions to decide, which will call for judgment, for knowledge and for ability which is far beyond mine. I have another feeling in this matter, also. It is generally felt that the young men of the Maine Medical Association do not have a voice in the affairs of the Association, and that it is a rather closed corporation. I certainly do not wish to be a partner to a closed corporation. I have served as best I could in the capacity of Councilor, never having missed a meeting for the three years, and I have no reason for resigning, except to step aside, or to step down in favor of a man of more capabilities. That is not innate modesty or any desire to shirk duty. I still expect and intend to do everything in my power for the advancement of this Association, but I do believe that this is an honor and a responsibility which should be spread out more generally.

I have served a term with pleasure and with profit to myself, if not to the Association. I should like to place in nomination, if I am allowed to do so, the name of Dr. Larson of Machias. He is not here, but he is a regular attendant at the Annual Meetings, usually; I do not know why he is not here this time. He is a capable gentleman, and one who would serve with distinction and benefit to the whole organization.

CHAIRMAN FOSTER: Then, do you wish to withdraw your name from nomination?

DR. BLISS: I do.

DR. TORREY: I would agree to withdraw my nomination on this request from Dr. Bliss.

CHAIRMAN FOSTER: We regret the decision of Dr. Bliss, because we should like to have him serve for another three years, but it takes a good deal of time, and there are distances to travel.

DR. BLISS: I have no regrets as to time or distance. I care nothing about that. The issue is one of spreading the responsibility and increasing the influence of the Maine Medical Association, which, to me, is the primary object of every one of us. I am very much aware of the honor of the position; I should like to shoulder the responsibility and take it on again, but I believe it should not be monopolized.

CHAIRMAN FOSTER: Your Chairman was about



to approach it from that angle, but Dr. Bliss expresses it much better.

You have heard the motion of Dr. Bliss. Is there a second to that motion?

*The motion was duly seconded by several of the members present.*

CHAIRMAN FOSTER: Are there any other nominations for the office of Councilor from the Fifth District?

DR. TORREY: I move that nominations be closed.

*This motion was duly seconded and was carried.*

CHAIRMAN FOSTER: On Dr. Bliss's motion, now; all those in favor of the nomination of Dr. Larson as Councilor from the Fifth District will please signify by raising the hands. Those opposed?

*There was an unanimous hand-raising vote, and the motion was carried.*

CHAIRMAN FOSTER: The Chair declares Dr. Larson of Machias duly elected as Councilor from the Fifth District.

Is there any other unfinished business or new business to come before this House of Delegates? The Chair is informed that this is the last meeting of the House of Delegates. The Chair appreciates the attendance of those who came here for the two meetings, especially those who are regular and steady in their attendance.

Dr. Plummer, we would be glad to have a word or two from you before the meeting is adjourned, if you have anything for the good of the order.

DR. A. W. PLUMMER of Lisbon Falls: I haven't anything particular to say. It is always a pleasure to be here.

CHAIRMAN FOSTER: We are always glad to have you here.

If there is no further business to come before the meeting, a motion is in order to adjourn.

DR. DRAKE: Mr. Chairman, I move that we adjourn.

*This motion was duly seconded and was carried.*

(Whereupon, the second meeting of the House of Delegates was adjourned at 5.45 P.M. on June 24, 1940.)

#### ELECTION OF THE PRESIDENT-ELECT

The meeting convened on Monday, June 24, 1940, immediately following the Clinico-Pathological Conference, with Dr. George L. Pratt, President of the Maine Medical Association, presiding.

PRESIDENT PRATT: I should like to say that we have an important piece of business to transact right now, and that is the election of the President-Elect. We are now ready to entertain nominations.

DR. H. E. SMALL of Fort Fairfield: I wish to nominate Dr. P. L. B. Ebbett of Houlton for the President-Elect. Dr. Ebbett has been a most efficient and helpful and conscientious practitioner.

He has always been willing to help out at medical meetings, and has given a lot of his time. He enjoys the highest reputation as a medical practitioner in our community. He has been in general practice for thirty-seven years. He was on the Examining Board for the Army in 1917; he served on the Council for six years, being the President of the Council in the last year.

I believe that Dr. Ebbett, if elected to this position as President-Elect, will be a most efficient officer.

DR. C. C. WEYMOUTH of Farmington: I wish to second the nomination of Dr. Ebbett as President-Elect.

DR. F. A. FERGUSON of Portland: I move that nominations be closed.

*This motion was duly seconded.*

DR. A. W. PLUMMER of Lisbon Falls: I don't like to establish a precedent here that we might perhaps regret at some time. I regard it as a laudable ambition for any man to desire the Presidency of this Association. I think it is perfectly proper for any man who would like to be President to get some friend to nominate him if he can. I think it would be perfectly proper for him to get up here and say that he would like to be President of the Association. Then, after all the nominations are in, I think we should go ahead and vote, and may the best man win. That is all right.

The reason I speak now, particularly, is because it might be that more than one man would like to be the President of this Association. I really don't know anything about it.

I do not personally desire to be President and I have no one in mind. I merely bring this up at this time to question the expediency of a motion that nominations be closed, or cease. I should prefer that this be left open; then, if anybody desires to nominate anyone else, he may do so.

Now, please don't misunderstand me. I haven't anything against Dr. Ebbett. I have no one in mind.

As I said, I think it is a laudable ambition for any member to wish to become President of this Association, and I only wish it were possible for all who would like to be President to have that wish carried out.

I trust that the gentleman will not enforce his motion or that the House will vote it down, for the reasons I have given. Personally, I have no axe to grind, nor have I anybody in mind for this office now or at any future meeting.

I have some question, Mr. Chairman, as to whether the motion was parliamentary in an organization of this kind, but I do not raise that question; I merely raise it for the purposes which I trust I have made plain.

DR. WEYMOUTH: I should like to say a word about the By-laws, with reference to the President-Elect of this Association. As I understand it, the By-laws read to the effect that it isn't a case of

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seeking; it is a case of being sought, so far as the President-Elect is concerned.

(The question was then called for.)

PRESIDENT PRATT: The motion before the House is that nominations be closed, and I understood that that motion was seconded.

You have heard Dr. Plummer's remarks. I want to say that we are glad to hear from Dr. Plummer. I have attended conventions for a good many years, and as I told Dr. Plummer a while ago, it didn't seem quite natural to have a convention without seeing and hearing from Dr. Plummer. We are very glad to have you with us again, Dr. Plummer.

All those in favor of the motion that nominations be closed will please signify by raising their hands. Those opposed?

All hands were raised, with one dissenting vote by Dr. Plummer, and the motion was carried.

PRESIDENT PRATT: Now, Dr. Ebbett is the only man put in nomination. What is your pleasure, Gentlemen?

DR. GEORGE E. YOUNG of Skowhegan: I move that the Secretary cast one ballot for the election of Dr. P. L. B. Ebbett of Houlton as President-Elect of this Association.

This motion was duly seconded by several of the members present, and was carried.

SECRETARY CARTER: And I hereby cast the ballot for the election of Dr. Ebbett as President-Elect of this Association.

PRESIDENT PRATT: I declare Dr. Ebbett duly elected as President-Elect of this Association. Is Dr. Ebbett here?

(There was no response.)

Dr. Ebbett is not here right now, so we will hear from him later.

I now declare this meeting adjourned. Before we adjourn, I wish to announce that there will be a meeting of the House of Delegates immediately in this room.

(Whereupon, the Monday Afternoon Session was adjourned at 5.15 o'clock in the afternoon.)

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## *Estimating the Operative Risk*

By EUGENE E. O'DONNELL, M. D., Portland, Maine

The ability to estimate the operative risk, that is, the operative mortality and morbidity and the grading of the operating to suit the individual is ordinarily referred to as surgical judgment. In this phase of the work there is a tremendous personal equation not only in regard to the patient but also in regard to the surgeon. In treatment of surgical patients we are confronted by three different types of individuals. First the group who is desperately ill and for whom surgery offers only faint hope of relief. In this group the mortality is necessarily very high and this increased mortality rate tends to give the practice of surgery a bad name among the laity and among our medical colleagues, so that others who ordinarily might be relieved either come to us too late or refuse operation entirely. It should be borne in mind in this connection that the surgical experience of the average referring physician is not necessarily broad and that he may very well become unduly prejudiced against certain procedures if his limited experience has been unfortunate. So that while it is our obligation to do whatever is possible to relieve suffering in this

group and while at no time should we hesitate to carry out necessary and justifiable procedures, still we must avoid the carrying out of futile procedures not only for the sake of the individual patient but also for the sake of surgical practice in general. Specific examples of this group would be such problems as a late malignancy of the gastro-intestinal tract.

There is a second group of cases in which the indications are fairly clear and where there are no gross contra-indications for surgical therapy such as the average case of chronic cholecystitis with cholelithiasis, or the myomatous uterus. It is incumbent upon us to make a careful study of each individual in this group. This study should consist of more than a casual sizing-up of the patient and the surgeon should never become so far removed from the practice of general medicine that he would be incompetent to carry out a careful history and physical examination and to manifest an interest in those aspects of the case which are not within his immediate field of endeavor.

There is still a third group of individuals,



namely those in whom the indications are not always clear but in whom the resources of other forms of therapy have been exhausted and who present signs and symptoms which may or may not be due to surgical disease. In this group a great deal depends on the procedure contemplated and the risk involved, whether the patient seeks relief from a disability because of pain or for some other reason and whether or not the patient is anxious to have something done in the hope of relief. It is in this group that the surgeon must be unusually cautious in making rash promises as to the end results. He must be sure that all forms of investigation and all non-surgical forms of therapy have been thoroughly exploited. Fortunately, the number of patients who are submitted to exploratory laparotomy at the present time are very few as compared with the experience of previous generations.

In the surgery of inflammatory lesions we often have the prospect of spontaneous resolution of the disease so that the patient in many instances may either be spared operation entirely or operation may be deferred until some more suitable time. In many inflammatory lesions we also have the choice of procedure between palliative operation at a minimal risk with a prospect of further surgery, or a more extensive procedure with a greater prospect of permanent cure but attended by greater risk. On these cases we must balance the risk of delay against the risk of intervention. In the selection of surgical patients it is necessary that we should have a long range point of view. For example, it is not conservative treatment to persist in the medical treatment of a peptic ulcer in spite of repeated gastric hemorrhages. It is not conservative treatment to carry along on a medical regime a case of chronic pulmonary suppuration until the patient has developed a metastatic brain abscess.

In the surgery of operable malignant disease, we must take a more militant attitude. We should carry out the most radical procedure that the patient will tolerate in the hope of a permanent cure. In this field there is no place for palliative surgery except as a preliminary step. Mortality figures must be of secondary importance if we are to do the most good for the greatest number. In other words, we can, in inflammatory lesions, make

the operation fit the patient; but in malignant disease we must, if possible, make the patient fit the operation. The factors which render the outcome of operative interference uncertain include first—age, as Harvey has pointed out. "The infant differs from the adult in ability to resist trauma, infection, and changes of temperature. His nutritional requirements are also different. The greater part of this difference is perhaps a question of mass. At birth he has one-twentieth to 1/25 the weight of the adult and a blood loss in operative procedures must be proportioned to this difference. For example, if the adult shows an effect from the loss of 500 c. c., the infant need only lose 20-25 c. c. to suffer the same disability. Likewise, the trauma of the operative procedure must be proportioned to the size of the patient. The infant also possesses an extreme susceptibility to infections. His resistance is especially poor to pneumonia and otitis media. Previous to birth, the child's body temperature was determined by its environment. This remains true in degree for some time after birth, so that the infant is more readily chilled than the adult. The metabolism of the infant is also a more finely balanced affair and its acid-base equilibrium is easily upset. Starvation rapidly leads to exhaustion of glycogen reserve, to protein wastage, and to an excessive utilization of fats. Therefore, vomiting in a degree inconsequential in the adult produces a serious loss of available chlorine and alkalosis may develop. The water balance is also easily disturbed. With deficient water intake the fluids become concentrated, the blood volume decreases and deficient circulation results." However, with these factors in mind, Foster contends that specific surgical procedures are well tolerated.

"In old age, the patient suffers from certain diseases, many of which are obvious and for which appropriate pre-operative measures may be instituted. The elderly person is a composite of the end results of the diseases from which he has suffered in the past or which may be present at the moment. Certain infections such as syphilis and tuberculosis may have left obscure but definite changes. Heart disease or kidney impairment may become troublesome only under the extra load of the operative procedure. The

older a person gets there is an increased susceptibility to fatigue or loss of reserve power which must be determined if possible." Recent developments emphasize the importance of vitamin deficiencies as a factor in susceptibility to infection, and wound healing. The question of the presence or absence of pregnancy is an important factor in determining operating risk. An abortion superimposed upon an operative procedure may render an otherwise safe situation doubtful and one must balance the danger of the primary disease against the operation plus the danger of the loss of the fetus. In such conditions as a toxic goiter, an inflamed gall bladder, or appendix, or a troublesome hernia, one's surgical judgment is frequently taxed to the utmost to determine the advisability of operative interference during pregnancy. Needless to say, procedures which can be carried out at some time other than during pregnancy should be postponed. It is well known that the mortality and morbidity varies somewhat with the color, social status, and mental state. The farmer who has lived a healthy outdoor life is ordinarily considered a better risk than the city dweller with a sedentary occupation. A careful estimation of the food and water balance is indispensable. The condition of the various organs and systems, such as the neurological system, the cardio-respiratory and cardio renal vascular systems must be determined by careful physical examination and by special tests when indicated. One must also consider the factors aside from the patient such as the operator and his assistants, the quality and type of anesthesia available, whether the operative procedure is

carried out in the surgeon's own hospital in which he is accustomed to work, or whether it is to be done in a strange place with untrained assistants, whether the operator will have the opportunity to direct and supervise the pre-operative and post-operative care or whether these important functions must be left to someone else.

In conclusion, the surgeon must be conscious not only in a general way of the operative mortality of a given procedure, but he must also have knowledge of the added risk of each operative step. He must balance the danger of draining the abscessed appendix or gall bladder against the removal of the organ with the chance of spreading peritonitis. He must learn when he should drain a case of intestinal obstruction and when on the other hand it is safe to perform resection with anastomosis. He must learn when he should do pelvic operations in one or more stages. In making these decisions he must consider not only the patient and his individual ability to withstand trauma but also if possible have a correct estimation of his own capabilities and a correct estimation of the conditions under which he must work. He must not place himself in the position of subjecting a good risk patient to a prolonged and extensive procedure to the extent that he or she will be unable to combat post-operative complications if they arise. He must always bear in mind that the first duty of the surgeon is to do the patient no harm.

#### BIBLIOGRAPHY

- Harvey, Samuel C.: Nelson Loose-leaf Surgery.  
Foster, T. A.: Personal communication.

Institutional care is always necessary at one time or another in treating tuberculosis, because of communicability. There is a considerable class which may be regarded as custodial cases, and there is need for domiciliary institutions where they can be cared for. When returned to the community results are often disastrous to them and their families. After-care and vocational rehabilitation are essential in restoring the patient to normal life. Masur, J., *Hosp. Management*, Oct., 1939.

The Shoemaker's Children—A seven-year study of the nurses in the New York Hospital disclosed that 47 cases of tuberculosis have been found among 2,841 graduate nurses and 3 cases among student nurses. Most of the graduate nurses found to be infected were recent graduates and the report states that for some it was not only their first job but also their first X-ray. Elsie Davis, R. N., and Harriet Frost, R. N., *Amer. Jour. of Nursing*, Apr., 1940.



## Pitfalls of Surgery

By EDWARD H. RISLEY, M. D., Waterville, Maine

The dictionary defines a Pitfall as "A Hidden Source of Danger." When pertaining to surgery, I am going to define a pitfall as "Something to be avoided by suspecting its existence beforehand."

It has always been my contention—and my teaching—that the best way in which to avoid mortalities in surgery was to treat your operative cases as if you expected a mortality in every instance, and then you would be so keenly on the outlook for trouble that trouble would probably not get a chance to develop, but if it did, you would be both forewarned and forearmed with means with which to fight it successfully. To illustrate: I am very sure that because I have always dreaded acute post-operative dilatation of the stomach as the very most serious post-operative complication, outside of hemorrhage, and have always suspected it the minute any patient had nausea or vomiting coming on 24 to 48 hours after operation, and have installed a duodenal tube at once, and, as a result of this attitude of suspicion, have never lost a patient from this insidiously creeping-up catastrophe. But, I have seen many cases in consultation in which the surgeon had not even thought of this possibility, probably because it did not conform to the textbook picture, and in which the patient died because proper treatment was instituted too late.

Post-operative dilatation of the stomach is a particularly fatal complication—always a hidden source of danger—a pitfall—and should always be suspected of being the cause of late nausea and vomiting until this can be proven to arise from some other source.

Pitfalls are not always inherent in the patient or his disease, but may lie in the mental equipment of the surgeon, and, as such, might be grouped under various fundamental failures, such as the following:

1. Failure to obtain a correct or a complete history.

2. Failure to make a complete physical examination.

3. Too great haste to operate.

4. Too much dependence of X-ray or laboratory findings.

5. Faulty interpretation of signs or symptoms.

In other words, if you fall into the pit, it is due, about 99 times out of 100, to failure to heed one or all of the above warnings.

It is manifestly impossible to even mention all of the many pitfalls which beset even the most careful surgeon in his daily work, but I will try to illustrate some of the above faults by definite case histories from my own experience.

### 1. POOR HISTORY TAKING.

A young woman of 27, with no previous serious illnesses, with a normal menstrual history and no pregnancies, gives the story of increasingly frequent attacks of right lower quadrant pain, without nausea or vomiting but with increasing constipation, loss of appetite and weight. Seen twice in an acute attack by her local physician who made a diagnosis of appendicitis and advised operation. Patient was operated upon in a country cottage hospital at the end of a subsiding attack, without benefit of X-ray study or a searching of the between-attacks-history, and regional ileitis was found.

**CRITICISM:** *Failure to get a complete history, too ready acceptance of the diagnosis made on another man's observation and without sufficient check-up.*

**COMMENT:** Regional ileitis should always be considered in right lower quadrant pain, especially if the history and physical examination are not definite.

One would also always do well to consider lead poisoning in cases with recurrent abdominal pain and a negative physical examination. Lead can be a definite pitfall, which can be avoided by keeping it constantly in mind.

Failure to get a complete history may

be the cause of certain cases of sepsis in clean, elective operations, because a history of a recent upper respiratory tract infection was missed. Such infections are not commonly enough recognized as a fruitful source of wound infection, but are, nevertheless, a very definite cause of such infection. One would do well to make it a hard and fast rule never to operate upon any but emergency cases for at least two weeks after the complete subsidence of any upper respiratory tract infection, both because of danger of wound infection and also of post-operative pulmonary complications; as these may occur even if a general anesthetic is NOT used.

## 2. FAILURE TO MAKE A COMPLETE PHYSICAL EXAMINATION.

I will venture the assertion that the great majority of the pitfalls into which we tumble—and from which we later suffer acute chagrin—result from failure to make a complete physical examination. This is especially true in acute head injuries, where all of our attention is liable to be centered in the (seemingly) most important lesion, and we fail to discover, or, perhaps, even look for the intra-thoracic or intra-abdominal lesion, which may result in an entirely unlooked-for fatality, while we are studiously studying a really less important lesion. Many a fractured pelvis has been missed at the onset of a head injury to the puzzlement of the surgeon, who is at a loss to explain pain and urinary tract complications of later onset.

The pitfalls of incomplete physical examination are legion. The mention of just a few will serve to emphasize my point.

In practically all cases of so-called "Indigestion," and for which the cause is not immediately evident, or which is not relieved in a short time by proper dietary measures, two things should be done before resorting to the more expensive procedure of having G. I. T. X-rays: 1. A complete blood count should be done to rule out pernicious anemia, and a rectal examination to rule out malignancy of the rectum.

But all cases of anemia with gastro-intestinal symptoms should have an X-ray of the

right colon to rule out carcinoma of the cecum. Many have been missed because of this omission.

When surgery is indicated in malignant diseases of the colon or rectum, failure to clear up an existing cystitis, pyelitis, prostatitis or vesiculitis may turn an otherwise favorable into a most unfavorable or even a fatal outcome because of neglect to clear up these G. U. infections before undertaking the necessary surgery.

## 3. TOO GREAT HASTE TO OPERATE.

This fault is most often evidenced in cases of malignant disease of the large bowel complicated by more or less obstruction. The fact remains, however, that it is extremely rare that any case of carcinoma of the colon requires immediate surgery of such haste that time cannot be spent overcoming dehydration by clysis and intravenous glucose, and anemia by transfusions, before attacking the obstructing lesion. If a case does present itself, with backing-up all along the intestinal line, then a cecostomy under local anesthesia is indicated immediately, and this puts the surgeon in a more strategic position in which to handle the obstructing growth at a later and safer date.

Haste to operate in acute empyema by rib resection will often produce a mortality where conservative, repeated aspiration or closed drainage would have been a life-saving measure. Acute empyema is never an emergency unless there is grave circulatory or respiratory difficulty.

Haste to operate in cases of acute salpingitis, except in face of intestinal obstruction, is also considered poor surgical judgment. Many of these cases can be localized in the pouch of Douglas and drained there, to await a later, safer salpingectomy.

Under this heading one might mention the failure to have ureteral catheters placed in both ureters, before attempting to do a pan-hysterectomy, for any reason, and an ordinary hysterectomy, in cases in which the mass is so tightly packed into the deep pelvis that the anatomical relations of blood vessels and ureters are thereby obscured or distorted.



#### 4. TOO MUCH DEPENDENCE ON LABORATORY OR X-RAY FINDINGS.

This is too large a subject to discuss in detail, but the old adage that if the laboratory findings do not agree with the clinical findings, they should be discarded and the clinical index followed, is a good one. One case will illustrate my point here.

A greatly overweight woman of 56 had symptoms strongly suggestive of gall bladder disease. She had never been jaundiced but she had suffered from repeated attacks of right upper quadrant pain, nausea and vomiting and local tenderness. She had also had a G. I. T. and G. B. series done in one of our best clinics two weeks before I was called, 80 miles away, to operate upon her for cholelithiasis, which was her local physician's and the X-ray diagnosis. Physical examination was unsatisfactory on account of excessive fat and neither G. B. or costo-vertebral tenderness could be elicited. At operation a perfectly normal, thin-walled gall bladder was found, but exploration of the right kidney fossa revealed a huge kidney with very nodular surface strongly suggestive of the stones described in the X-ray report.

*CRITICISM: Operation undertaken without more careful review of past history, and acceptance of local physician's diagnosis based on X-rays not seen by myself.*

5. Probably our most excusable pitfall lies in wrong interpretation of signs or symptoms, which may, in reality, be both misleading or actually fail to paint the true picture.

Two cases will illustrate.

A. Female, 47, had a supra-vaginal hysterectomy for large pressure producing fibroid, June 29, 1937; a difficult operation because of male type pelvis and consequent lack of room in which to visualize and tie off the uterine vessels. The ureters were not catheterized before operation, but it was not thought that they had been injured. July 8, dull pain in region of right kidney, but with no C. V. tenderness and a negative urine. July 10, severe pain in right loin, almost

complete anuria, temperature 103, pulse 140; cystoscopy and pyelograms showed no involvement of kidneys or ureters. In the P. M. white count rose to 44,000 with 95% polys; a diagnosis of probable mesenteric thrombosis made and operation showed a gangrenous gall bladder.

*CRITICISM: Probably fair to say that this was an unavoidable pitfall due to symptoms and signs pointing very definitely to organs other than those involved. However, it is put down as a failure in observation or interpretation.*

B. Male, 77, sudden, profuse hematuria 13 years after prostatectomy. Cystoscopy showed blood coming from the old prostatic bed. Visualization and catheterization of the ureters impossible because of deformity and contracted bladder. Suprapubic cystostomy, no bleeding seen, base of bladder and ureteral orifices, normal. This was followed two days later by so severe bleeding that the blood could be seen to spurt from the penis. Then sudden onset of hematemesis, to almost complete exanguination, repeated blood transfusions, followed by violent hiccough, uncontrollable for eight days; second suprapubic exploration because of further bleeding from the penis independent of urination, discovery of blood clot protruding from right ureteral orifice, pyelogram, disclosing a non-functioning right kidney, requiring nephrectomy for hypernephroma, cardiac decompensation, generalized furunculosis, and eventual recovery.

*CRITICISM: Failure to suspect kidney lesion at the onset of hematuria, but partly excusable because of the spurting of blood from the penis, misleading cystoscopic findings and the onset of hematemesis, which further obscured the picture.*

So far I have spoken only of clinical pitfalls, but I cannot leave the subject without a warning about two other equally important pitfalls, which observation convinces me are sources of danger to altogether too many of us.

**FIRST: NEGLECT OF CONSULTATIONS.**

As I analyze the situation, failure to consult is due in far too many cases to two inexcusable inhibitions:

1. Unwillingness to admit that one does not possess complete knowledge of the case in hand.

2. Fear that the patient, or the family, will think that we are not entirely competent because we seek another's advice and help.

The first is a most regrettable attitude and should not be allowed to be an influencing factor with any reputable physician. The second is a foolish fear. Patients who are not intelligent enough to recognize the value of consultation are useless to us as supporters of our standing in the community. But the wise and worthwhile patient will always be grateful to us for the request for consultation.

Probably the most valuable form of consultation is the staff consultation to which every member of the staff contributes and from which the greatest amount of information can be expected.

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Knowledge of disease has now advanced so far that it is very often desirable to treat the patient before he knows that he is sick. People stricken with acute disease hasten to their doctor for aid. Those suffering from a chronic disease of insidious onset tend to put off their visit to a doctor and to seek relief by self treatment. Yet we know that, in many diseases, the best hope for cure depends on early treatment; treatment even before the symptoms appear. This is not only true of tuberculosis but of several other diseases including the two at the top of the list of causes of death; cancer and heart disease. It is true of diabetes, of many cases of syphilis, and of certain kidney diseases which though so slight as to be overlooked may cause high blood pressure later on. An attempt has been made by the American Medical Association to adjust the private practice of medicine to this situation but periodic medical examinations have not been widely accepted. J. Rosslyn Earp, M. D., *Health News*, May, 1940.

**SECOND: NEGLECT OF POST-GRADUATE EDUCATION.**

It is altogether too easy for the busy surgeon to become so absorbed by his work, to become so satisfied with his progress or financial success, that he neglects the many opportunities to get away from the busy routine and go where men do things differently than he does, to learn new ways, more modern points of view and to keep his mental as well as his surgical equipment up-to-date.

Failure to do this is a pitfall into which altogether too many of us fall. There is nothing so refreshing to the tired mind, and nothing so inspiring to better work, as a trip to another clinic at regular intervals.

I would leave this thought with you: "Do not neglect your pre- or post-operative care—do not neglect your post-graduate education, otherwise continuous pitfalls will loom up before you for the rest of your professional lives."

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The possibility of utilizing the general hospital as an effective medium for case-finding in tuberculosis has not been sufficiently explored. The fact that a person is admitted to a general hospital for a condition other than tuberculosis should never be accepted as a guarantee that such person does not have significant tuberculous disease. In a study of 4,853 adult admissions to 14 general hospitals in New York State, 1.1% showed clinically significant tuberculosis and 0.6% unsuspected tuberculosis. Plunkett, R. E., M. D., and Mikol, Edward X., *Amer. Rev. of Tuber.*, Mar., 1940.

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There is no reason for tuberculosis to be five times more prevalent in some communities than it is in others. Thomas Parran, M. D., U. S. P. H. S.

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About 100 A. D. Martial said, "Life is not mere living but the enjoyment of health."



## *Estimation of Operative Risks and Choice of Anesthesia*

By GILBERT CLAPPERTON, M. D., Lewiston, Maine

In anesthesia we are dealing with the strongest and most powerful drugs used by the medical profession; all anesthetic agents should be considered dangerous—but with a knowledge of the pharmacology and toxicology of these agents; the physiology of respiration and circulation; and the employment of many precautions prior to, during and following the administration—these dangers can be reduced to a minimum.

Very often, the question is asked—"What constitutes a good anesthesia?" That is a hard question to answer as there are usually three points of view and a "good anesthesia" so-called is not always a "safe anesthesia." To the patient it may merely be wishing to go to sleep in a hurry, or he may wish to be asleep before he leaves his room, or may wish some certain agent so that he will not be nauseated. To the surgeon, it primarily means marked relaxation in order to facilitate his work. To the anesthetist a good and safe anesthesia embodies a combination of factors, namely: the choice of a chemically dependable agent controllable during and after,—with ease of induction and recovery,—and lastly, with a minimum resultant damage upon the systems.

The preparation of the patient for anesthesia begins from the time he enters the hospital—at least from the time surgery is contemplated.

It is desirable to have the patient hospitalized at least 24 hours before operation during which time he becomes somewhat accustomed to the new environment.

This also allows for a careful and complete history, physical examination and necessary laboratory data. The latter should include at least a urinalysis and complete blood count—other tests, such as blood chemistry, kidney function tests, etc., should be done when indicated.

The anesthetist should visit the patient the day before operation—conduct an examination himself of the heart, lungs, blood pressure and upper respiratory passages, inquire as to previous anesthetic experiences, select

the agent and method and order the preliminary medication. This visit makes for confidence in the anesthetist, allows the patient reassurance and allays many false fears when he knows that the chief factor in the choice of an anesthetic agent is his own safety.

In the preoperative estimation of the anesthetic and surgical risk the classification used by the Lahey Clinic<sup>1</sup> seems to be the most satisfactory. The scale employed is that ordinarily used for rating signs and symptoms (1, 2, 3, 4, designating respectively slight, moderate, marked, and extreme). "1" means Good Risk—nothing being found in the patient's condition that adversely affects the risk; "2" means Fair Risk—one or more adverse factors present, but are not serious; "3" means Poor Risk—one or more serious adverse factors present; "4" means so seriously sick that death is likely unless the downward progress is quickly reversed. With this classification all unfavorable conditions and diseases including the condition for which operation is to be performed are considered together. (Severity of proposed operation not taken into account.)

From the anesthetists interview, examination of the patient there are several points of prime importance which immediately take the patient out of the Good Risk class and demand careful selection of the anesthetic agent and careful preparation of the patient.

These are:

1. Age of 50 years or over.
2. Weakness or prolonged invalidism.
3. Depressed psychic state—Premonition of death.
4. Marked weight loss—resulting in diminution of glycogen reserve.
5. Marked obesity — interferes with breathing; increases difficulty and trauma of abdominal operations; patients more prone to develop complications.
6. Upper respiratory infections.

7. Diminished vital capacity—emphysema, Tbc.
8. Mechanical obstruction to free breathing—compression of trachea, paralysis of a vocal cord, deep infections of the neck and floor of mouth.
9. Persistent vomiting — resulting in acute starvation and acidosis.
10. Intestinal obstruction—with reduced blood chlorides and elevated nonprotein nitrogen.
11. Marked anemia—reduction of blood volume and lowered hemoglobin content results in inadequate tissue oxidation and an accumulation of waste products.
12. Organic Heart Disease.
13. Hypertension.
14. Abnormal Hypotension.
15. Hepatic Insufficiency.
16. Diabetes.
17. Renal Insufficiency.
18. Dehydration.
19. Thyrotoxicosis and other specific toxemias.
20. Shock.

Adequate and careful choice of premedication is almost equally important as the anesthetic agent itself. Premedication permits deeper anesthesia with lower concentration of the agent. Premedication reduces the metabolic rate which in turn reduces reflex irritability, which in turn reduces anesthesia resistance. On the basis of metabolism and oxygen requirement the greatest amount of premedication would be required for the adolescent—the least for the very young and aged. The young, 6 to 18 years, require the most premedication. Usually we give too much to the old and too little to the young. The patient should be the deciding factor as to the dosage. Routine dosage of premedication invites trouble.

Some considerations to bear in mind are:

Physical status of the patient and his metabolic rate.

Presence of fever—every degree rise increases oxygen requirement 7%.

Pain—increases metabolic rate.

Fear and Apprehension—increases metabolic rate.

Specific Toxemias—increases metabolic rate. e.g., Thyrotoxicosis.

In general for Inhalation Anesthesia the drugs of choice are Morphine and Scopolamine or Atropine. For Spinal and Local anesthetics a short acting Barbiturate, such as Nembutal, Morphine and Scopolamine. These should be given in sufficient time to obtain their maximum effect when the patient arrives at the operating room and not too late so that their effect becomes apparent and confusing after the supplementary agent has been started. Some form of a Barbiturate should be used as premedication in all cases having local or spinal anesthesia as prophylaxis against Procaine. reactions.

Morphine given subcutaneously will exert its effect on pain in approximately 20 minutes, but requires 60 to 90 minutes for its full sedative effect upon metabolism. In emergency cases morphine should be given intravenously along with atropine or scopolamine.

There are many factors which influence the choice of an agent: the surgeon, the surgery to be done, the patient and existing pathology, the ability and technique of the anesthetist with his agents and methods at hand. With these in mind the criterion of choice is the end result of anesthesia and operation combined and not the anesthesia alone.

The evaluation of an anesthetic agent should rest on the following factors:

1. Chemical dependability of agent.
2. Potency (without oxygen-want).
3. Control (during and after).
4. Resultant damage upon systems.
5. Ease of induction and recovery.
6. Commercial properties.

The margin of safety of an anesthetic may be defined as the amount of drug and length of time required to pass from light surgical anesthesia to death.

#### ETHER

Ether is a potent agent with a wide margin of safety, offering good relaxation. Eighty-



five to ninety per cent is eliminated through the lungs, the remainder through the skin, urine, and other body fluids. Complete disaturation is dependent upon the depth and duration of anesthesia, the average time being about 8 hours. It is inflammable and highly explosive when vaporized with air or oxygen.

This agent is toxic to the respiratory tract, kidneys, liver, and gastro-intestinal tract; hence it should be avoided if possible in cases where pathology exists or function is depressed in any of these systems.

It is best administered in conjunction or as a supplement with the gases, by the CO<sub>2</sub> absorption technique.

#### CHLOROFORM

Chloroform is a very potent agent with a very narrow margin of safety. It is extremely toxic to the circulatory system and liver. Deaths with this drug are due to circulatory failure with the heart stopping in diastole. Its use is to be discouraged and one of the newer and safer agents substituted.

#### ETHYL CHLORIDE

The margin of safety of Ethyl Chloride is very narrow, and its toxicity approaches that of Chloroform. Its use, like that of Chloroform, is to be discouraged in favor of safer and less toxic agents.

#### VINYL ETHER

This is one of the newer agents which, because of its wider margin of safety, is replacing Ethyl Chloride for use in short operations and for induction to ether. The induction period is rapid, as is recovery. Salivation however, seems to be about twice as great as that experienced with ether. There is some question in regard to its toxic action on the liver in long or repeated administrations.

#### NITROUS OXIDE

Nitrous oxide is the weakest of all agents. The margin between anaesthesia and asphyxia is narrow—thus any degree of anoxemia is a toxic factor itself. For satisfactory anesthesia and to allow adequate oxygenation, one must use heavy doses of premedication. It is not well tolerated, and should be avoided in car-

diacs, arterio-sclerotics, alcoholics, "nervous", and "athletic" types.

#### ETHYLENE

This gas is similar in action to nitrous oxide, but is more powerful and can be given with more oxygen. It is being replaced rapidly by the less toxic agent, Cyclopropane.

#### CYCLOPROPANE

Cyclopropane is probably our nearest approach to an ideal inhalation agent. Its margin of safety—though not as wide as ether—is good, and it is a potent agent with low toxicity. Induction with this agent is rapid, as is recovery, and the major part is eliminated within ten minutes with very little nausea and vomiting. The systemic effects of Cyclopropane are minimal. There is no effect upon the normal or diseased respiratory tract. The heart rate tends to be slowed, and an overdose affects the conducting mechanism. Liver and kidney function is not altered. It is indicated in poor risks in general, and any patient requiring large amounts of oxygen. It is effective in approximately fifteen per cent concentration. This gas is explosive in all mixtures. Contraindications to the use of this agent are cardiac irregularities, cautery, and high frequency currents.

#### AVERTIN

This drug is detoxified by the liver and eliminated through the kidneys. It depresses both respiration and blood pressure. Absorption is usually complete in twenty minutes, and is not controllable. In safe dosage it is a weak agent, and is best supplemented with Cyclopropane, Nitrous Oxide, or local infiltration. The contraindications to its use are as follows:

- Hepatic and renal disease
- Toxemia, shock
- Chronic Pulmonary Disease
- Old age. Hyper- or hypo-tension
- Pathology of the lower bowel

#### SPINAL ANESTHESIA

The lack of toxic action on various organs of the body, the extreme muscular relaxation offered, and recovery without nausea and

*Continued on page 282*

## *Post-Operative Management*

By WILLIAM V. COX, M. D., F. A. C. S., Lewiston, Maine

Post-operative management is the last important step in the immediate care of the surgical patient and follows as a logical step after the operation. Before considering specific procedures of post-operative care, it is well to bear in mind some of the general principles. Post-operative treatment cannot be expected to satisfactorily take care of omissions of the necessary steps in pre-operative care, errors in surgical judgment or technique at the time of the operation.

The best treatment of many of the complications which arise during the post-operative course is their prevention. The surgeon should be certain that his own house is in order before searching elsewhere for the explanation of a patient's failure to make a satisfactory convalescence. The greater share of post-operative complications arise in the operative field or result from some abnormal situation at the site of operation. Some of the factors which are of special help in prevention of post-operative complications are:

1. Careful pre-operative preparation of the patient and elimination in so far as possible, of the factors which may cause complications. This can be especially well done in elective operations but must ever be kept in mind even in emergency operations.

2. The use of the proper anesthetic agent and the careful and skillful administration of the anesthetic. The importance of this is borne out by the fact that with the improvement of anesthesia, there has been a marked decrease in the complications which may be directly attributed to the anesthetic agent.

3. A carefully planned surgical attack on the problem at hand and due consideration of the important principles of good surgical technique. Important among these principles are adequate exposure of the operative field, good hemostasis with minimum blood loss and gentle handling of the tissues in order to give minimum trauma and damage to the tissues, thus promoting good wound healing.

Again post-operative care must be modified

or changed depending upon the type of surgical procedure which has been carried out, whether it be abdominal, urological, neurological, thoracic or some other type of specialized procedure. But whatever the procedure has been, it is important to carry out careful and frequent observation of the patient during the post-operative course so that early signs of any complication may be found and the proper therapy instituted. In this way the treatment will be simplified and much more efficient.

The more common measures to be carried out in post-operative managements fall under the following headings:

### SEDATIVES

The patient must be kept comfortable following the operation by the frequent use of morphia, pantopon or some of the other drugs now in use. The dosage required varies in individual patients, but it is frequently wise to order the drug to be given regularly at intervals of every four or five hours, rather than to leave the matter to the discretion of the nurse in charge of the patient. Care must be taken not to depress the respirations too markedly, soon after operation, as this tends to promote pulmonary complications, especially atelectasis. But the patient must be kept comfortable by use of the proper drug.

### FLUIDS

Following operation it is necessary to maintain a proper fluid balance with a fluid intake of 2,000-4,000 c. c. daily and a daily output of urine of from 1,200-1,500 c. c. Care must be taken in elderly patients who have a questionable cardiac reserve not to overload the heart with resulting pulmonary edema. In such patients it may be necessary to give less fluids at more frequent intervals. We have at hand at the present time numerous excellent methods of administering fluids so that there is no reason to allow the patient's fluid intake to fall below a good maintenance figure.



## LABORATORY STUDIES

Where there is any question of complications arising, laboratory studies of the blood and urine should be carried out, including not only routine blood and urine studies but also blood concentration of urea, chlorides and carbon dioxide combining power. The studies of the blood should be repeated as frequently as seems necessary to determine whether sufficient fluids and electrolytes are being administered. It is well to keep in mind that pre-operative laboratory studies are carried out with a two-fold purpose, first to aid in making a pre-operative diagnosis and second to be used as a basis of comparison for laboratory studies carried out in the post-operative period. Therefore normal laboratory findings previous to operation may prove to be very valuable in the post-operative period.

## PULMONARY COMPLICATIONS

Pulmonary complications subsequent to operation usually consist of atelectasis, broncho-pneumonia or pulmonary embolism. Altho it might be felt that atelectasis should occur more frequently after general anesthesia, experience has shown that it occurs probably with as great frequency after spinal anesthesia. Much can be done to prevent pulmonary complications by the following measures:

1. Frequent change in the position of the patient so as to allow good aeration of all portions of the lungs.

2. Tracheal aspiration at the close of the operative procedure and at frequent intervals thereafter is necessary in order to insure a clear airway and eliminate the possibility of a mucous plug in one of the bronchi with resulting atelectasis. If this latter does occur much can be accomplished by single or repeated bronchoscopic examinations and the aspiration of the mucous plug under direct vision.

3. The use of oxygen by means of oxygen tent or nasal catheter, especially when cyanosis is present. In those patients where there is a depression of respirations, this may be aided by the use of carbon dioxide, or the combination of oxygen and carbon dioxide.

## POST-OPERATIVE DISTENSION

Much of the difficulty may be eliminated by keeping to a minimum the trauma to loops of intestine during abdominal procedures and by the judicious use of such drugs as prostigmine both during the pre-operative and post-operative period. However, despite these measures, distension will occur in some patients.

One of the most important elements in the post-operative treatment of patients subjected to operations on the intestine is continuous gastro-duodenal aspiration. This method gives a great degree of rest, both physical and physiological, to the gastro-intestinal tract. The development of the Miller-Abbott double lumen tube has increased the possibilities of post-operative treatment. Decompression of the entire intestinal tract down as far as the caecum can be carried out more quickly and efficiently than it is possible with the method of Wagensteen. Decompression of a greatly distended small bowel in the presence of peritonitis when peristaltic movements are minimal is not satisfactory with a simple duodenal tube and the method of Wagensteen.

## SHOCK

The subject of the prevention and treatment of shock has been the theme of hundreds of articles and many books during the past twenty years. It is fortunately less often encountered at the present time as the result of surgical procedures, but has frequent occurrence in traumatic accidents such as automobile accidents. The best treatment is local heat, intravenous fluids and blood transfusions. But by far the most important point to be remembered is the early recognition of the condition and the early institution of measures to combat it. The measures to combat the condition should begin during the operation or immediately at the cessation of the operation, rather than several hours later after the patient has returned from the operating room. This is well illustrated in major thoracic procedures where as a routine procedure an intravenous drip is begun at the beginning of the operation and one or more transfusions are given during the course of the procedure.

*Continued on page 282*

## *The President's Page*

*To the Members of the Maine Medical Association:*

An important event for the State Association is the Annual Clinical Session at Bangor on October 17th and 18th. A detailed account of the Program appears elsewhere in the JOURNAL this month. I want to call the members' attention to the fact that the Session will open Thursday night, October 17th, with a dinner at the Bangor House at 8.00 P. M. After dinner, Dr. Abraham Creadick of the Obstetrical Department of Yale School of Medicine will address the gathering. He will speak on a phase of obstetrics, a subject of interest to all practitioners.

Friday morning the clinical meeting will open at the Eastern Maine General Hospital at 8.30 A. M. A variety of clinics will be offered. Luncheon will be served at the hospital, and case reports with discussions will occupy the afternoon. The final discussion will be conducted by Dr. George C. Wilkins of Manchester, N. H., who will speak about the New Hampshire method of conducting tumor clinics. Our Tumor Clinics in Maine continue to show a steady growth, and our Association Cancer Committee hopes to have a full and active discussion at this meeting.

The Penobscot County Medical Society have looked forward to this meeting for a long time and have made plans for a pleasant and informative session. And the future of the Annual Fall Clinical Session depends in no small measure upon the attendance and response to this year's meeting at Bangor.

With a program condensed into one evening and one day, with the new wing of the hospital open for inspection and with the renowned hospitality of Bangor awaiting us, it seems as though we should have a well attended and enthusiastic meeting.

THOMAS A. FOSTER, M. D.,

*President, Maine Medical Association.*



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WENDELL L. WILLKIE  
109 EAST 42ND STREET  
NEW YORK CITY

Colorado Springs  
August 7, 1940

My dear Doctor -

You have asked my views on socialized  
medicine. I am against it. You can quote me  
any place on this.

Cordially yours,

WENDELL L. WILLKIE

Dr. T. Leon Howard  
Denver, Colorado.

*The Rocky Mountain Medical Journal* for September, 1940, prints  
the above letter to Dr. T. Leon Howard, of Denver, Colorado.

## Editorials

### *Some Problems of National Preparedness*

The problems of adequate national preparedness are so complex and far reaching they seem sometimes impossible of attainment. The building of an effective war machine demands that we must re-adjust ourselves to conditions of fact; that in many ways we must change our ways of living and substitute the economy of peace for the economy of war—as if there could be economy in war—and in this vast and intricate mechanism the profession of medicine becomes an important part. While some of the problems of medicine are concerned with those wounded in action and those incapacitated by illness while under enlistment they are a small part. It has well been said that putting a uniform on a physician does not make him a military surgeon any more than the robing of a lawyer qualifies him as a jurist. Experience is not lacking in this regard. What demands may come to this country, and they must be met if we are to preserve our methods of life, no one knows. That demands will come if the present titanic world convulsions have any significance must be apparent. If it becomes a direct question of We or They the responsibilities of the medical and ancillary professions become one of our first lines of defense and protection. Our national strength, to be effective, must by necessity be capable of aggression of the highest possible degree but to be aggressive it must be implemented by man power of the best possible fitness, which fitness can be obtained only by the expert training of those who will operate the highly technical machine of modern warfare but those who will be called upon to build and maintain it. They must be protected, as far as possible, from those diseases and injuries that are preventable; medicine of peace must be substituted for the medicine of war for if it is otherwise the modern technical implements employed today become useless.

No sane person wants war at any time in this country. We hate war and war-like

peoples. Mobilization of the vast resources of this country for war has a sinister meaning, but no rational person can view what has taken place in Europe and not be fearful that it will spread here. Such fears and possibilities can be minimized if we are in a position to prevent it. Despite the fact that our national life must go on, its efficiency even stepped up in any and all ways, adequate defense depends on careful and expert planning, coöperation in any and all things that may be demanded and which may impose individual and collective sacrifices seemingly hard and unjust at the time. A prepared nation can look with greater confidence to the future.

In times of war the medical profession has thrust upon it problems that do not ordinarily exist and to the unthinking do not concern it. Medicine has always been fighting a war. War against disease, pestilence and death; war against any and all things that make life less safe and happy and the struggle must go on. Our medical schools must continue in the training of men and women so they can assume their proper places in the ranks; our hospitals and public health services will have increased demands that must be met; the civilian population will need more than ever before expert medical care that it may meet the burdens demanded by the machine of war. All of these duties and responsibilities belong to medicine. Teamwork and liaison with those delegated for any service is one way of assuring success. Success that we may live as the United States of America and success that civilization as we know it shall not become extinct. The statement made in appreciation of the gravity of the situation we now face, if the totalitarian powers become successful and capable of enforcing their demands on the world as a whole, that some of us may well be content to be as old as we are but God help those who come after us is not without significance.



## *Annual Conference of State Secretaries and Editors Not to Be Held*

It has been the custom of the Board of Trustees of the American Medical Association to hold an annual conference with the Secretaries of Constituent State Associations and Editors of State Medical Journals. That these conferences have been of great interest and value any one who has attended can testify.

Some of the major reasons for the omission this year are as follows: The work incident to the undertakings of the Committee on Medical Preparedness is tremendous in volume and engages at present a major part of the time of the administrative personnel of the Association. It is obvious that this important task must be carried on to completeness.

The number of meetings to be required of the Committee on Preparedness cannot be determined as yet but it is probable that the Committee have two, if not more, conferences with State chairmen. The first meeting be-

tween the Committee and chairmen will be on September 20th, in Chicago.

Another reason, and this should strike home to every member, is that the Association has been officially informed that the case of the United States versus the American Medical Association et al., is definitely set for trial on October 21st. The case will extend over a period of two months or more and will require in Washington for that time at least four of the administrative officers of the Association.

The costs in both activities will be very heavy. Concerning those for the Committee on Preparedness the Association will meet that as part of its duty. That we should be forced to spend a large sum for the defense of the Association and some of its officers against an indictment, to us seemingly unfair and unjust, may well be considered as one of the results of some of the "undiluted poisons" mentioned by the President.

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### *Gilbert Clapperton—Continued from page 276*

vomiting, makes spinal anesthesia popular and valuable in abdominal and rectal operations, bone and joint surgery of the lower extremities, and genital-urinary surgery. Its contraindications are cases of marked arteriosclerosis, anemia, shock, hyper- and hypotension, obesity, myocarditis, and pathology of the central nervous system.

#### INTRAVENOUS BARBITURATES

These drugs (Pentothal, Sodium preferred) find a big field of usefulness in short surgical procedures lasting from thirty minutes to an hour. The chief contraindications are:

- Extremes of age
- Hepatic disease
- Respiratory obstruction
- Pulmonary pathology

There are many agents and methods to consider when choosing an anesthesia. The paramount factor for the safety of the patient lies

in the knowledge and skill of the individual who administers the drug.

#### REFERENCES

1. Woodbridge, P. O.: Pre-operative Estimation of The Anesthetic and Surgical Risk. *American Journal of Surgery*, Vol. 34, No. 3, 410-418, Dec., 1936.

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### *William V. Cox—Continued from page 278*

#### EMBOLISM

From the beginning of the post-operative period, patients should be encouraged to move their arms and legs actively and frequently. Such movements, with their attendant increase in the flow of blood in the veins, are the best protection obtainable against the development of thrombophlebitis and possibly future embolism. There are those who advocate active exercise even after a definite thrombophlebitis has developed, but such treatment seems to give poorer results than immobilization of the part involved, once a definite thrombophlebitis has developed.

## Necrology



*Arthur T. Whitney, M. D.,  
1900-1940*

Doctor Whitney was born in Houlton on the 14th of September, 1900. His early education was obtained in the public schools of Houlton. He graduated from Bowdoin in 1922 and obtained his degree in medicine from Boston University Medical School in 1927. He served an internship in the Massachusetts Memorial Hospital in Boston, four months on the obstetric service of the Worcester City Hospital and followed this as a resident in the Worcester State Hospital, commencing practice in Houlton in 1929.

Arthur Whitney exemplified that type of general practitioner who becomes an important member of his profession and community. Early in his work he became actively identified with the social and civic betterments of Houlton; a great friend of young people, he was intensely interested in and devoted much time in their behalf, and was

always willing to serve his profession in capacities requiring no little time and effort. For years he was a most efficient and loyal secretary-treasurer of the Aroostook County Medical Society and was serving as its president at his death. Since the incorporation of the Aroostook General Hospital he was its treasurer and a member of the Board of Governors, and was one of the Board of Council of the Town of Houlton.

Death came to this good friend and beloved colleague suddenly and tragically in a drowning accident on September 22nd. His passing leaves a definite void with his many patients, and his profession mourns the loss of a loyal and truly wonderful friend. He loved life and he spared no effort to bring happiness to others.

He is survived by his wife, Gladys Morehouse Whitney, one son and a daughter.



## *Program*

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### ANNUAL FALL CLINICAL SESSION MAINE MEDICAL ASSOCIATION

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*Bangor, Maine*

*Thursday, October 17th*

*8.00 P. M. at the Bangor House*

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*Friday, October 18th*

*8.30 A. M. to 5.00 P. M.*

*at the*

*Eastern Maine General Hospital*

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#### *Registration*

Thursday, October 17th, at the Bangor House.

Friday, October 18th, at the Eastern Maine General Hospital.

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#### THURSDAY, October 17th

8.00 P. M. Dinner at the Bangor House

Speaker: Abraham N. Creadick, M. D., New Haven,  
Connecticut, Associate Clinical Professor,  
Obstetrics and Gynecology.

Subject: An Obstetrical subject of general interest.

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#### FRIDAY, October 18th

at the

Eastern Maine General Hospital

8.30 A. M. to 11.00 A. M.

#### Operative Clinic

Magnus Ridlon, M. D., Bangor

R. M. Zollinger, M. D., Boston

Hysterectomy

Cholecystectomy

#### Case Presentations and Clinical Observations

Chester S. Keefer, M. D., Boston

Wilfred J. Comeau, M. D., Bangor

Lawrence M. Cutler, M. D., Bangor

Clarence Emery, M. D., Bangor

Albert W. Fellows, M. D., Bangor

Leroy H. Smith M. D., Winterport

John E. Whitworth, M. D., Bangor

Henry C. Knowlton, M. D., Bangor

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11.00 A. M. to 12.00 M.

## Orthopedic Symposium

Allan Woodcock, M. D., Bangor  
Samuel S. Silsby, M. D., Bangor  
Forrest B. Ames, M. D., Bangor

## G. U. Symposium — Urinary Stasis

Earl S. Merrill, M. D., Bangor  
Carl E. Blaisdell, M. D., Bangor

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12.00 M. to 2.00 P. M. Buffet Luncheon at the Hospital

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## 2.00 P. M. to 5.00 P. M.

## Case Reports and Observations

Asa C. Adams, M. D., Orono  
Edward A. Blank, M. D., Bangor  
Walter R. Gumprecht, M. D., Bangor  
Theodore S. Moise, M. D., Bangor  
Harold E. Pressey, M. D., Bangor  
Harrison L. Robinson, M. D., Bangor

## The New Hampshire Plan for Cancer Control

George C. Wilkins, M. D., Manchester, N. H.

It is expected that Doctors Keefer, Creadick and Zollinger will be present Friday to direct discussion.

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*Special Notices**Hotel Reservations*

Hotel reservations may be made at the Bangor House or Penobscot Exchange.

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*County Secretaries*

There will be a meeting of County Secretaries on Friday, October 18th, at the Eastern Maine General Hospital, at 12.30 P. M. All County Secretaries are urged to be present.

FREDERICK R. CARTER,  
*Secretary-Treasurer, Maine Medical Association.*

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*Committee on Graduate Education*

There will be a meeting of the Committee on Graduate Education on Friday, October 18th, at the Eastern Maine General Hospital at 12.00 noon.

County Secretaries are cordially invited to attend this meeting.

FREDERICK T. HILL, *Chairman.*

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*Committee on Tuberculosis*

There will be a meeting of the Committee on Tuberculosis on Friday, October 18th, at the Bangor House at 12.00 noon.

EDWARD A. GRECO, *Chairman.*

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*For the Ladies*

There will be a bridge party and tea for the ladies Friday afternoon at the Nurses' Home at the Eastern Maine General Hospital.



## County News and Notes

### Androscoggin

The Androscoggin County Medical Society held its first regular meeting of the year Thursday afternoon, September 19, 1940, at the Auburn Y. M. C. A.

The Scientific Section presented a program which consisted of two very interesting papers. The first was *Fractures of the Bones about the Hand*, by Morris Goldman, M. D., of Lewiston, and the second was *Placenta Previa*, by Edwin Kay, M. D., also of Lewiston.

Louis B. Hayden, M. D., a native of Maine formerly practicing in Plymouth, Massachusetts, has recently returned to Livermore Falls to practice medicine. His application to transfer his membership to the Androscoggin County Medical Society was accepted.

Respectfully submitted,  
WEDGEWOOD P. WEBBER,  
Secretary.

### Kennebec

A meeting of the Kennebec County Medical Association was held at the Gardiner General Hospital, Thursday, September 19, 1940.

Clinical Session at 5.00 P. M., which was presided over by Blynn O. Goodrich, M. D., President:

- (1) Krunkenburg Tumor—C. G. Farrell, M. D.
- (2) Arteriosclerotic Dementia — A. B. Libby, M. D.
- (3) Cerebrospinal Meningitis—C. R. McLaughlin, M. D.
- (4) Appendicitis with Intestinal Obstruction—F. B. Bull, M. D.
- (5) Monstrosity—M. E. Joss, M. D.
- (6) Acute Nephritis—I. E. McLaughlin, M. D.

Dinner at 6.30 P. M., which was followed by a business meeting.

Minutes of the last meeting were read and approved.

The application of Napoleon Gingras, M. D., of Augusta, Maine, was received and referred to the Council.

The speaker of the evening was Duncan Reid, M. D., who is associated with the Boston Lying-in Hospital. His subject was "Use of X-ray in Obstetrics." The paper was ably presented and amplified by X-ray plates. A general discussion followed.

There were forty members and guests present.

Respectfully submitted,  
FREDERICK R. CARTER, M. D.,  
Secretary.

### Knox

A meeting of the Knox County Medical Society was held at the Copper Kettle, Rockland, Maine, on September 17, 1940.

Following ward rounds at the Knox County General Hospital the meeting was called to order by the President, Doctor Apollonio. Minutes were read and approved. A fee schedule desired by Doctor James Jackson was discussed and postponed

until the next meeting. Attention was called to a meeting to be held on October 16th when Frederick T. Hill will be present and will talk on the relations between doctors and the hospital, and the directors and the hospital, and the hospital with the doctors and directors.

Doctor Van S. Smith of the Parkway Hospital in Brookline was presented by Doctor Carswell and talked on Cancer, presenting cases and giving a very interesting and instructive talk on the diagnosis of early cancer, the difficulties encountered and pitfalls to be avoided. The benefits of treatment and percentages of cures when the case is in its early stages were very interesting. He stressed the fact that nothing more as to the cause of cancer is known now than thirty years ago. He also expressed the opinion that a person having one primary cancer which had apparently been cured was more liable to have another primary cancer than one who had never had any. A general discussion followed.

A. J. FULLER,  
Secretary.

Meetings of the Knox County Medical Society were held in May and August with Doctor George Holmes of the Massachusetts General Hospital as guest speaker at the May meeting, and Doctor Thomas A. Foster, President of the Maine Medical Association, speaker at the August meeting. Both were interesting speakers and the meetings were very instructive and well attended.

A. J. FULLER,  
Secretary.

### Piscataquis

The annual meeting of the Piscataquis County Medical Association was held at the Mayo Memorial Hospital in Dover-Foxcroft, Thursday, September 19th.

The following officers were elected:

President—F. J. Pritham, Greenville Junction.

Vice-President—A. M. Carde, Milo.

Secretary-Treasurer—N. H. Nickerson, Greenville.

Delegate to the 1941 annual session of the Maine Medical Association, H. C. Bundy, Milo. Alternate, N. H. Crosby, Milo.

Board of Censors—Ruth B. Thomas ('41), M. O. Brown ('42), W. E. MacDougal ('43).

Legislative Committee—Guy E. Dore ('41), M. O. Brown ('42), E. D. Merrill ('43).

Frederick T. Hill, M. D., of Waterville gave a most instructive and timely talk on *Chemo-therapy in Relation to Oto-Laryngology*.

All but three of the eighteen members of the Piscataquis County Medical Association were present.

N. H. NICKERSON,  
Secretary.

### Somerset

Howard L. Reed of Madison was elected President of the Somerset County Medical Society at a meeting held Thursday, August 29th, at Lakewood.

Other officers elected are:

Vice-President—Allan J. Stinchfield, Skowhegan.  
Secretary-Treasurer—Maurice E. Lord, Skowhegan.

Delegate to the 1941 annual session of the Maine Medical Association, George E. Young, Skowhegan.  
Alternate, Franklin P. Ball, Bingham.

Board of Censors—H. W. Smith, W. S. Stinchfield, and H. E. Marston.

MAURICE E. LORD,  
Secretary.

## New Members

### Androscoggin

Louis B. Hayden, M. D., Livermore Falls, Maine.

### Cumberland

Neil L. Parsons, M. D., Damariscotta, Maine.

### Somerset

Henry A. Brann, M. D., Madison, Maine.

## Change of Address

### Kennebec

A. B. Allen, M. D., from 177 Main St., Waterville, Maine, to Corinna, Maine.

### York

William H. Kelly, M. D., from Bridgton, Maine, to Wolf Building, Sanford, Maine.

## Coming Meetings

### Kennebec

Kennebec County Medical Association, Frederick R. Carter, M. D., Augusta, Maine, Secretary.

Thursday, November 21st, at the Elmwood Hotel, Waterville, Maine. Program to be announced.

Thursday, December 19th, at the Augusta State Hospital, Augusta, Maine.

Speaker: A. Warren Stearns, M. D., of Boston.

Subject: To be announced.

## Special Notices

### Government to Need Temporary and Part-time Civilian Medical Officers

The expansion of the army creates a need for about 600 civilian medical officers in various grades for temporary and part-time service. The duties of full-time officers will be to act as doctors of medicine in active practice in hospitals, in dispensaries, and in the field. The duty of part-time officers will be to report for sick call at a fixed hour each day and to be subject to emergency call at all times.

The Civil Service Commission in making this announcement calls particular attention to the fact that part-time officers will be able to continue their regular practice. In order that this may be done, appointments to the part-time positions will be made of medical officers in the vicinity of the place of duty.

Information concerning these positions may be obtained from the Secretary of the Board of U. S. Civil Service Examiners at any first- or second-class post office, or from the United States Civil Service Commission, Washington, D. C. Physicians are urged to apply at once. This work is of the greatest importance to the success of the National Defense program.

### Tumor Clinics

Bangor: Eastern Maine General Hospital  
Thursday, 11.00 A. M.-12.00 M.  
Director, Magnus F. Ridlon, M. D.

Lewiston: Central Maine General Hospital  
Tuesday, 10.00 A. M.-12.00 M.  
Director, E. V. Call, M. D.

### St. Mary's General Hospital

Wednesday, 4.00 P. M.

Director, R. A. Beliveau, M. D.

### Portland: Maine General Hospital

Thursday, 11.00 A. M.-12.00 M.

Director, Mortimer Warren, M. D.

### Waterville: Sisters Hospital

1st & 3rd Thursdays, 10.00 A. M.

Director, B. O. Goodrich, M. D.

### Thayer Hospital

2nd & 4th Thursdays, 10.00 A. M.

Director, E. H. Risley, M. D.

### Venereal Disease Clinics

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Millinocket, Old Town, Portland, Presque Isle, Rockland, Rumford, Sanford, Waterville, Wilton, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on request to the Director, State Bureau of Health, Augusta, Maine.

### Found

An Ophthalmoscope. Loser may obtain information regarding same by calling JOURNAL office. Tel. 3-5671.



# New England Postgraduate Assembly

Sponsored by the Massachusetts, New Hampshire and Rhode Island Medical Societies,  
the Maine Medical Association and the Vermont State Medical Society

November 13-14

Sanders Theatre, Harvard University, Cambridge, Massachusetts

The above medical societies cordially invite all registered physicians in New England to attend the third New England Postgraduate Assembly. An up-to-date review of new ideas in diagnosis and treatment will be presented on each subject. The speakers are well-known authorities in their respective fields. The list of guest speakers is as follows:

Dr. Fred L. Adair, Chicago, Illinois.

Dr. Henry W. Cave, New York City.

Dr. Russell L. Haden, Cleveland, Ohio.

Dr. Sumner L. Koch, Chicago, Illinois.

Dr. Robert F. Loeb, New York City.

Dr. Harrison S. Martland, Newark, New Jersey.

Dr. T. Grier Miller, Philadelphia, Pennsylvania.

Dr. Oliver S. Ormsby, Chicago, Illinois.

Dr. Percy S. Pelouze, Philadelphia, Pennsylvania.

Dr. Tracy J. Putnam, New York City.

Dr. Ralph M. Waters, Madison, Wisconsin.

The registration fee for the Assembly is three dollars; this does not include dinner and luncheons which will be served at reasonable rates. A program giving further details and containing an application blank for registration and instructions for obtaining luncheon and dinner tickets will be mailed to every licensed physician in the sponsoring states. It will greatly aid the committee in charge if these applications are promptly forwarded to the Postgraduate Assembly Committee, 8 Fenway, Boston.

DR. FRANK R. OBER, *Chairman*

DR. LEROY E. PARKINS, *Secretary*

DR. CLARENCE F. BALL

DR. JOHN P. BOWLER

DR. REGINALD FITZ

DR. FREDERICK T. HILL

DR. ROBERT N. NYE

DR. JOSEPH W. O'CONNOR

DR. EMERY M. PORTER

POSTGRADUATE ASSEMBLY EXECUTIVE COMMITTEE

## Book Reviews

### *"Operative Surgery"*

By: J. Shelton Horsley, M. D., L. L. D., F. A. C. S.; Attending Surgeon, St. Elizabeth's Hospital, Richmond, Va.; and Isaac A. Bigger, M. D., Professor of Surgery; with contributions by: C. C. Coleman, M. D., F. A. C. S., Professor of Neurological Surgery; Austin I. Dodson, M. D., F. A. C. S., Professor of Urology; John S. Horsley, Jr., M. D., Associate Professor of Surgery; Donald M. Faulkner, M. D., Associate Professor of Orthopedic Surgery; all of the Medical College of Virginia.

Two volumes.

Illustrated by Helen Loraine.

Fifth Edition. Published by The C. V. Mosby Company, St. Louis, Mo., 1940. Price, \$18.00.

Rapid progress in surgery made necessary the publication of this new and greatly improved edition of this well known work. The greatly revised text has been liberally adorned with 1,391 good illustrations. Among the many items of interest mentioned for the first time in book form are ligation of the patent ductus arteriosus, segmental pneumonectomy, extrapleural pneumothorax, and new material of technical nature in the treatment of orthopedic injuries, malformation and repair. Many new surgical techniques of various authors are included in this edition. All through his work the author tries to follow his belief that "The principles underlying an operation are correct only if they conform to the laws of physiology and to the laws of repair of the tissue or organ that is affected." The information contained in this new two volume work is comprehensive and practicable. Above all, it is brought up to the present time.

### *"The Poison Trail"*

By: William F. Boos, M. D.

Published by Hale, Cushman & Flint, Boston and New York, 1939. Price \$3.00.

If man could know when, why, how and where matter which in proper combination maintains life undergoes changes which render beneficent air, food, drink, etc., into maleficent agents, we could learn to distinguish correctly between friendly poisons and poisonous friends and learn to devise protective measures against their destructive action. Dr. Boos gives us much useful information in this charming, partly autobiographic narrative. He shows how necessary it may become to practice much care and caution in our breathing, eating, drinking, even handling of materials employed in the business of living. The air we breathe, the food we eat, the drinks we enjoy so much, our clothing, the cosmetics with which we cover and beautify our body, our home workshop, vacationland, they all may offer dangerous surprises. If we can learn to be careful before we indulge in dangerous habits, it may not be necessary to call in the poison expert for consultation after indulgence. In the last chapter of "The Poison Trail" and in the Appendix the practicing physician is told what is expected of him if he is called upon to give expert testimony in court when the poison trail's end is reached. It all is interesting and helpful reading for the medical man.

### *"Clinical Heart Disease"*

By: Samuel A. Levine, M. D., F. A. C. P.; Assistant Professor of Medicine, Harvard Medical School; Senior Associate in Medicine, Peter Bent Brigham Hospital, Boston; Consultant Cardiologist, Newton Hospital; Physician, New England Baptist Hospital, Boston.

Second Edition, Revised and Reset.

Published by W. B. Saunders Company, Philadelphia and London, 1940. Price, \$6.00.

Four years ago the first edition of this work appeared and was well received. Even though no fundamental changes have occurred during the elapsed time, changes of a technical nature which have been developed are included in the new edition. Also included is the information gleaned from periodic literature, various prints of practical importance, and a brief discussion on matters of medico-legal importance in relation to traumatic heart injury. There is a detailed discussion of the precordial lead, also of electrocardiograms which were taken with a new technique. The terminology employed is that recently recommended by the committee of the American Heart Association and the Cardiac Society of Great Britain and Ireland. Methods of diagnosis and treatment are those used by the author in his office and hospital practice.

### *"Synopsis of the Principles of Surgery"*

By: Jacob K. Berman, A. B., M. D., F. A. C. S.; Assistant Professor of Surgery, Indiana University School of Medicine, Indianapolis.

With 274 Illustrations.

Published by The C. V. Mosby Company, St. Louis, 1940. Price, \$5.00.

This new member of the Mosby Synopsis family is designed with the idea of correlating the basic sciences with the fundamental principles of surgery. The rather dogmatic adherence to established principles is maintained because the author believes that the medical student must forever remember the principles of the medical arts and sciences no matter how far and fast he may progress in his own field. It encourages planned perseverance rather than aimless drifting.

### *"A. M. A. Council on Pharmacy and Chemistry Reports, 1939"*

Published by the American Medical Association, Chicago, 1940. Price, \$1.00.

This book contains reprints of articles, reporting on various medical substances, as published in the *Journal of the American Medical Association*. They are mostly of an educational nature and not of the "Not Acceptable" type. There are several very interesting reports on Sulfapyridine, Neoprontosil, Dilantin and many other substances, including vitamins, poli-vitamine mixtures and vitamin K.

This year's report is somewhat large and also is considered of greater interest than were volumes of previous issues.



**"The Newer Nutrition in Pediatric Practice"**

By: I. Newton Kugelmass, B. S., M. A., Ph. D., Sc. D.; Attending Pediatrician, Broad Street Hospital and Heckscher Institute, New York; Consulting Pediatrician, Lynn Memorial Hospital, Monmouth Memorial Hospital and Muhlenberg Hospital, New Jersey, etc.

183 Illustrations.

Published by J. B. Lippincott Company, Philadelphia, Montreal, London, 1940. Price, \$10.00.

The author of this highly scientific treatise believes that child growth is a measurable process which demands measurable material of appropriate quality and adequate quantity for optimum functioning of the organism and must be balanced according to the chemical plan of the whole being. Since all true growth, normal and otherwise, results from processes resulting from specific chemical reactions between certain substances we must try to obtain as much knowledge as is possible concerning any and all of these substances and processes. To all appearances this book contains all of the practicably usable knowledge that is available at this time. All nutritional requirements and nutritional formulas are carefully described and methods of combination are explained. Diet arrangements for normal children, also for children of all ages up to 15 years who require considerable variation in their diets while afflicted with the usual or unusual diseases are given in considerable number and variety. It seems that any food requirement can be selected and prescribed from these tables. Your feeding problems are here scientifically and clearly solved.

**"Neoplastic Diseases—A Treatise on Tumors"**

By: James Ewing, A. M., M. D., Sc. D., LL. D.; Professor of Oncology at Cornell University Medical College, New York City; Consulting Pathologist, Memorial Hospital.

Fourth Edition, Revised and Enlarged.

With 581 Illustrations.

Published by W. B. Saunders Company, Philadelphia and London, 1940. Price, \$14.00.

This remarkable work on neoplastic diseases was begun in 1919. There have been new editions in 1922 and 1928. Since then much work has been done. It is well that all worthwhile new knowledge is brought together by Dr. Ewing in this new edition. He has succeeded and has presented to the medical profession a comprehensive treatise on tumors. Everything that can be known at the present time concerning the nature of the various types and forms of new growths which afflict mankind is here clearly and authoritatively described. The author is well aware that in view of the voluminous material that has been put in print concerning all phases of new formations, benign and malignant, no one book can include all solutions to the many and varied problems. He hopes, however, that he has succeeded in creating a readable critical review of the most important and reliable accomplishments. There are over seventy pages of bibliographical references and a good index.

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# The Journal of the Maine Medical Association

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Volume Thirty-one

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No. 11

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## *Safeguarding the Surgeon\**

By HERBERT E. LOCKE, *Attorney-at-Law*, Augusta, Maine

### FOREWORD

Surgery has become so perfected that the doctors can tell for sure what is wrong inside and there is no longer any reason to have unfortunate incidents or poor end results.

This statement is untrue, but it is the view of the uninformed laity.

Efforts by the profession to correct this view by explanation of the numerous risks would cause some alarm and probably result in avoidance of surgery by patients who truly need it—and accomplish little or no good for either patient or practitioner.

This view of the laity that pre-operative diagnosis and surgical treatment approach being an exact science necessarily results in dissatisfaction, claims and even malpractice suits in those unavoidable instances where Nature is perverse.

### MALPRACTICE CLAIMS INCREASING

Ten years ago, addressing the New England Medical Council, I asserted that claims by patients against physicians and surgeons complaining of treatment given had increased substantially during the ten or a dozen years

preceding that time. And I gave my notion of the causes. Necessarily, I was referring chiefly to Maine where I was and still am concerned with the study and defense of such claims. Another decade has passed. My observation is the same, with this qualification: the coöperation of the profession in discouraging—in place of encouraging—invalid or doubtful claims against brother practitioners has, to a degree, halted the increase we would otherwise find.

In 1932, Lloyd Stryker, Esq., for many years general counsel for the Medical Society of the State of New York, made the considered statement that in recent years “there has been a veritable flood of such cases.” New York State and particularly New York County furnished the chief source of Mr. Stryker’s observation.

In 1936, Thomas D. McDavitt of the Bureau of Legal Medicine of the American Medical Association stated in a prepared paper that, in the preceding twenty years, “malpractice claims have increased materially in frequency, in the amount of damages demanded and in the variety of allegations of malpractice . . . . This increase has run coin-

\* Presented at the Surgical Conference at the 88th Annual Session of the Maine Medical Association, Rangeley Lakes, Maine, June 25, 1940.



cident with the more extensive use of surgery." He speaks of the entire country.

A memo issued by the American Medical Association in the winter of 1938-39 says the same, continuing: "Most of these malpractice claims and suits have been based on alleged negligence in surgical operations, in the treatment of fractures and in the therapeutic use of X-ray, radium and various types of heat or light therapy."

Here in Maine, more than half the claims do involve surgery: the operation or its incidents. This is no discredit to the surgeon, nor credit to the internist and general practitioner. The fact is, surgery offers the greater risk.

My task is to reduce the incidence of these claims and mitigate the results of them. If, by my discussion here today, even one claim is avoided, I count your time and mine well spent. Consequently, I am glad to comply with the request of the Conference Chairman and to consider with you the topic assigned to me.

#### "SAFE-GUARDING THE SURGEON"

If, as I stated at the outset, the laity mistakenly views surgery as something approaching an exact science and is inclined to judge the surgeon, as they would the lawyer in the Court-room, by results obtained, then it follows that every precaution taken, every safeguard employed to reduce the risk and make the result approach perfection is to be sought. It is relatively immaterial to the point of our present discussion that the hospital or nurse, not the surgeon, was at fault or even that nobody was at fault. To safe-guard the surgeon from claim, we ignore at the moment the validity of such claim. Fine distinctions of legal liability come later if a claim develops to be defended.

The suggestions made in the four previous papers deserve consideration. They are based on study and experience. The surgeon who follows them safe-guards his patient and incidentally thereby tends to safe-guard himself. I add a few suggestions based likewise on my study and experience with the profession in Maine, considering for convenience the period preceding the surgery, the surgery, and the period following the surgery, in that order. Many of you will say, in substance:

We knew that anyway. I reply that repeated actual incidents and claims resulting therefrom involve these points.

#### PRE-OPERATIVE

*Tests of patient's condition.* Have sufficient tests been made? Is this patient in condition for the contemplated surgery which, in this instance, can be delayed during a period of build-up or special therapy?

If a T. & A., has there been a satisfactory blood coagulation test? Speaking of results in this connection, isn't one of the chief factors in the lowered mortality rate in thyroidectomy the postponement of surgery with a period of pre-operative treatment?

*Tests for diagnosis.* Is the abdominal condition pregnancy? Or uterine tumor? Or ovarian cyst? More tests for aid in diagnosis are available now than formerly and more will be available as the science advances. We must keep up.

*X-ray for confirmation* of reduction as well as diagnosis of the fracture. Grant that you are perfectly satisfied from observation and manipulation that your fracture is well reduced. Grant that you confirm your views with fluoroscope. Only the X-ray is proof. Every fracture case is a potential malpractice claim and you may need that proof.

Furthermore, you protect your patient as well as yourself by that confirmatory X-ray. If the patient or his sponsors raise the question of expense, pay for it yourself. Usually the charge is not based on number of plates anyway. There might not be any additional expense.

*Consent of patient or relative to the surgery—and the surgeon.* The law guarantees the patient against assault. Surgery unauthorized in its extent or unauthorized as to the particular surgeon performing it is assault. Such unauthorized surgery is universally condemned by the Courts of this country and substantial punitive damages, smart money, punishment damages, have been repeatedly awarded. That the surgery was skillful and well performed or that it was desirable, if not absolutely necessary, is no legal defense to a claim that it was unauthorized. At most, those factors may mitigate the dam-

ages allowed. Consequently, secure consent not only for the surgery you contemplate on your diagnosis but to "such surgery as in the judgment of the attending surgeon and his assistants and associates is considered necessary or advisable." In hospital cases, such consent in writing on a form provided therefor is obtained easily and without adding materially to the work of anyone. A doctor operating in the home or in his office requires but a moment to pull from the wallet containing his prescription blanks a little type-written sheet containing the substance of the consent.

Consent to the surgery is not enough. Patient must consent to the particular surgeon performing it. Conscientious general practitioners have called in competent surgeons, specialists in the particular field, in the belief that they were within their rights in doing so without securing the formal consent of the patient that the particular surgeon so called in should operate or assist in the surgery. The general practitioner says to himself: The patient authorizes the surgery; he has utter confidence in me; I will call in one of two or three of the good men in that field to "assist." He does so. He is guilty of assault because he procured an unauthorized act to be done. The utterly innocent specialist is likewise guilty of assault. That the specialist did an excellent job and procured a good result does not defeat the claim. Punitive damages may be awarded against both. Further, if you carry malpractice insurance—and the surgeon who does not do so is extremely unwise in these days, in my opinion—the insurer may deny coverage to both the surgeons involved. Generally speaking, they write a policy insuring against liability for error in treatment, i. e., negligence, not voluntarily wrongful act like assault.

Let the patient agree that the particular surgeon called in is to operate. Again, use the written memorandum if in the hospital. Secure the consent anyway.

*Guarded prognosis.* By his optimistic and cheerful attitude, the surgeon often aids the patient materially in convalescence, but instances show us that too optimistic a prognosis to the patient is oftentimes construed as a guarantee. Then if an untoward incident

occurs in convalescence or if end results are not perfect, the patient repeatedly concludes that the doctor must have done something wrong, and there follows some dissatisfaction with the surgeon, with the profession and a possibility of a malpractice claim.

*Other injuries or pathological conditions.* I say "Amen" to Dr. Risley's demand for as complete an examination as circumstances and the nature of the case permit. Obvious fractures in one leg or one part of the leg have received careful and successful treatment while another fracture in the other leg or in another part of the leg has escaped attention completely and united in malposition or caused serious after effects.

You surgeons know better than I that a fracture in the vicinity of the knee accompanied by pain and readily diagnosed may not be the end of the story; that there may be a fracture of the pelvis or in the pelvic region unaccompanied by pain referred to that area. Fortunately, the immobilization and rest employed in treating the diagnosed fracture is oftentimes good and successful (even if unintentional) treatment for the pelvic fracture.

#### THE SURGERY

*Foreign bodies.* The layman, unfamiliar with the necessary procedure and the exigencies of the operating-room, the division of responsibility there, the necessity for concentration by the surgeon exploring and operating, is shocked by the loss of a sponge and cannot conceive that such can occur without the surgeon being grossly negligent. We know better. But this is not the occasion to argue the point with the laity. I earnestly recommend a study of the various facilities, methods and devices used or even suggested for the purpose of accurate sponge count, and to avoid the loss of a sponge in the patient. The practice can not perhaps be standardized, but at least study by a proper agency of this Association might result in some helpful suggestions, the following of which would be to the great good of the surgeon in Maine as well as the patient.

*Drains and tubes.* Drains are bound to change position at times, in the treatment of a suppurating abscess in the patient's neck,



for instance. They have to be used. They have to stay there a while. They have to be replaced. Replacement must come many times when the surgeon is not in attendance. I recommend that the hospitals be urged to devote particular attention to a technique to the end that these drains be counted with care, the count fully reconciled and that any other steps which can be devised after thought be employed.

*Tubes.* They must be fastened, else they sometimes are lost into the opening with distressing result.

*Broken needles*—particularly in the repair of a perineal tear. Again, the layman can not understand why a needle should break in such instances. They do. Is there any suggestion of technique to reduce the likelihood of breakage?

*"Tight" casts.* Many, if not most, disturbances to blood circulation manifesting themselves after fracture and application of cast and splint are due to damage to the blood vessels in the original injury. It does no harm to take note of the extensiveness of the damage to the soft tissues and to note in the hospital record the possibility of impaired circulation as a development which may occur. Further, our hospitals should coöperate closely in following the surgeon's instructions and watching closely so that the edema following the injury to the soft tissues shall not make the cast become "tight." So-called tight casts have repeatedly furnished the basis for a claim where impairment to the circulation appeared and the extremity was lost.

Protect yourself if patient refuses the advised treatment. If, for instance, a patient has delayed union in a fracture of the forearm and refuses a second attempt at bone freshening, with complete non-union and a false joint in the middle of his arm as a result, write a statement into that hospital record that the bone freshening was advised and refused and have the patient sign it. If he won't sign it, which is unlikely, go to the extreme of having witnesses sign a memorandum that the advice was given and refused, and some of the patient's friends and relatives make the best witnesses for the point.

*Confusion of liquids in receptacles on the side table.* This has caused us no difficulty, practically speaking, in Maine, but the Legal Medicine Bureau of the American Medical Association, with whom I keep in touch, suggests that I call to your attention the possible confusion of alcohol and anesthesia. Repeated instances of such have occurred in other states, and it is suggested that, first, the two be kept on separate tables and, second, that they be placed in different types of containers and, third, that the surgeon smell the solution before using it. I am happy to pass on this suggestion, although as distinguished from the other items I mention, this has caused no difficulty to me in Maine.

*Sterilization.* Such surgery I divide into four types of instance. *First, therapeutic.* Another pregnancy may be so fraught with immediate danger to the female that fallectomy is justified as a proper measure for the preservation of her health and life. When performing it, employ a few safe-guards. Have the independent advice and approval of another surgeon, have the consent of the husband, not legally required but practically advisable. Ignore the husband's lack of consent in emergency, of course. Reduce the consents to writing for practical protection. Vasectomy may be therapeutic of course and legally permissible. But in few instances.

*Second, the feeble-minded.* The statute permits sterilization of such. But not merely because the surgeon thinks it is advisable. Only by following the rather complicated statutory proceeding providing for examination and adjudication may the feeble-minded person be sterilized. See P. L. 1933, Sec. 77.

*Third, sterilization, particularly of the female, for convenience and to satisfy the family plans of the couple.* This is entirely indefensible. Consent of the party involved is no defense whatever. The law jealously protects the unborn and denies sterilization as well as abortion except for therapeutic purposes.

*Fourth, sterilization for economic reasons.* Economic distress during the past decade has resulted in an increase of requests for sterilization.

Considerable public sentiment supports sterilization in some distressing instances, for the good of society and the relief of the family from acute economic distress.

But the law has not been changed. A crusading county attorney seeking a vehicle for reelection, a women's club searching for an objective for the year, a religious organization in complete good faith seeking compliance with the laws of the state, any one or all of these could procure prosecution of a surgeon performing sterilization for economic or alleged reasons of social good.

Perhaps the law will be changed. Birth control is becoming legalized. Forceful arguments are offered for sterilization for the economic and social good. I have no part in the argument. But I do remind the surgeons of Maine of their legal responsibility in criminal law as it is now written in this state—and in most states, in fact all, generally speaking. I advise against such surgery.

These remarks are made not upon the basis of knowledge or assumption on my part that such surgery is being performed. But surgeons have been repeatedly requested to perform such surgery for economic or social reasons and have sought my advice on it. Necessarily such requests will be expected to continue.

*Liability for acts of others.* Denying the rule in a few Western courts, our court adopted in a case I tried within a few years our contention that the hospital and its employees are independent agencies working in conjunction with the surgeon and are not his "servants and agents." He is not liable for errors of nurse, anesthetist, pathologist, bacteriologist or anybody else not his employee. But this does not relieve the surgeon of a duty to take some care that the facilities offered him are reasonably satisfactory. If he knows or believes they are not, he should either (1) refuse to do the surgery under those circumstances, or (2) secure the complete and provable agreement of the patient to the surgery then and there and the assumption by the patient of the risk. Such circumstance will seldom occur. And its occurrence may cause embarrassment to the surgeon. But it can occur. It has occurred, hence the necessity of mentioning this point.

## POST-OPERATIVE

*Disclosure of incomplete surgery* for interpretation of future symptoms. An attempted appendectomy presented a mass of adhesions about the caecum and it being necessary to cease operating and close the belly, the surgeon uncertain whether he had secured appendiceal tissue sent it to a pathologist. He reported no appendiceal tissue. The surgeon disclosed good judgment in so doing. But there is a further and important step: disclosure to the patient of the incompleteness of the surgery. To permit him to understand that he has had an appendectomy would likely result in symptoms otherwise attributable to appendicitis being assigned to some other cause in the future. The patient might fail thereby to have proper surgery. Or he might be subjected to surgery not necessary or required. Consequently the failure to disclose in such case, even though not active negligence in any way, would furnish a basis for a malpractice claim.

Failure to disclose alleged "poor end result." The surgeon may not accomplish his objective because of circumstances encountered which he cannot control, and for the good of the patient, he fails to disclose such fact during convalescence. The disappointment created might be very harmful to the patient. But advise him seasonably, i. e., when in your judgment the harm, if any be occasioned the patient by the disclosure, is overbalanced by the necessity of honestly advising him.

Impress clearly upon the patient and preserve, if possible, *proof of vitally important advice* given in connection with post-operative symptoms. A surgeon attends a female following childbirth in a remote location some distance from his office. He is advised that the placenta has come away and been burned. From the description, it could well be placenta, not organized blood clot. But he advises that if, after a certain period, hemorrhage occurs, he must be called at once. It does occur, he is not informed, a secondary anemia follows with serious harm to patient. The surgeon is not at fault but the patient and her family deny the advice was given, saying that had it been given, they would, of



course, have followed it. A letter from the surgeon to that patient or her family reminding them of the advice given in a few words, with a copy of such letter kept, would relieve from the very annoying situation which that instance and others like it have produced.

Sympathetic ophthalmia in the remaining good eye may develop as a result of failure to remove the remains of the damaged and sightless eye. The literature is extremely insistent in demanding that the surgeon impress upon the patient the importance of its removal, and particularly the importance of immediate notice to the surgeon in event of any disturbance to the remaining good eye. Because otherwise the tragedy of complete blindness occurs.

Patients repeatedly refuse removal of the damaged and sightless eye, usually do. The general practice of such refusal does not excuse the necessity of the advice. In fact, it makes more imperative the giving of such advice. In a case I had, that advice was given: First, to remove the eye; refused. Second, to report immediately the slightest disturbance to the remaining eye. That advice wasn't followed. Blindness resulted. Patient or at least his attorney denied the advice was given. A short letter confirming, first, the advice for removal and, second, that the patient return immediately a disturbance developed would avoid the claim.

*Follow-up after the surgery.* Surgeons are called to distant places by local practitioners. It is impractical, if not impossible, to attend to post-operative care. What may the surgeon do? He has the primary responsibility following that surgery he has performed. He must give, first, the necessary amount of post-operative advice, and second, personal attention unless he takes care that a truly qualified practitioner is giving that personal attention in accordance with his advice. This places quite a burden upon the competent surgeon who must travel to other sections. But it must be followed to a reasonable degree; else decided risk is incurred for the patient and, consequently, for the surgeon.

More so-called "safe-guards" could be mentioned. Time does not permit. But I petition you for one more safe-guard—a safe-guard to your brother practitioner:

Concede the propriety and the correctness in technique of prior surgery until from inquiry made to the prior surgeon and a full ascertainment of all the facts, you must conclude otherwise. You are no more justified in indicating by innuendo or otherwise that there was probably something wrong with the prior surgery than I would be in giving my client to understand the advice or procedure of another lawyer previously given or employed was wrong. We don't decide the case until the evidence is in. We can't know what we are talking about until we know all the facts. In this connection, I do not intend to scold to a great degree or to lecture officiously.

The human trait which leads one to suggest, perhaps by innuendo alone, that had the patient or client consulted the particular doctor or lawyer in the first place, all might have been well, is still with us. Guard against it. Your fellow practitioner is entitled to that safe-guard. Call him up. If you are to treat the patient, you should have the benefit of an understanding of the previous history which you can obtain fully and adequately from no other source. Incidentally, you will probably learn facts which demonstrate the propriety of his treatment.

If this safe-guard be followed, there will be less malpractice cases in this state and elsewhere.

Again, I do not assert that failure to employ this safe-guard is the basis of all malpractice claims or of many. It is not the basis of so many as it was a dozen years ago. It furnishes something of a basis for some, however. While it is any part of the problem, I cannot avoid mentioning it.

#### CONCLUSION

You surgeons are interested in surgery, not in legal disputes. You may well be impatient of many of these safe-guards I have suggested. You consider yourself a surgeon, not a sleuth or a crank who fears every patient is going to sue him. But my own experience shows that every surgical operation is a potential malpractice case and that actual cases have demonstrated some force at least to the suggestions I have offered.

Dr. Risley has discussed some of the "pitfalls of surgery," and your major papers have

concerned safe-guarding the patient. To safe-guard the surgeon from the pitfalls I have suggested and others of similar sort will safe-guard the patient also.

#### SUMMARY

Claims of malpractice because of alleged poor results or unfortunate incidents connected with surgery have increased. The following safe-guards are suggested:

#### PRE-OPERATIVE

1. Tests and delay of surgery, if indicated, with therapy meanwhile.
2. Further examination and tests for closer diagnosis.
3. X-ray for confirmation of result obtained.
4. Provable consent to the surgery—and to the particular surgeon.
5. Conservative prognosis—else patient's disappointment results in dissatisfaction and claim.
6. Search for further injuries or pathology.

#### THE SURGERY

1. Problem of foreign bodies demands careful technique, particularly as regards:
  - (a) Sponges.

- (b) Drains and tubes.
- (c) Broken needles.

2. Alleged "tight" casts.
3. Provable protection if patient refuses the advised treatment.
4. Confusion of liquids—alcohol and anesthesia.
5. Sterilization:
  - (a) General therapeutic permissible.
  - (b) Also Feeble-minded under Pub. Laws 1933, Ch. 77.
  - (c) For disinclination to bear more children—criminal.
  - (d) For economic or "social" reasons, also criminal.
6. Liability for errors of other persons in some instances.

#### POST-OPERATIVE

1. Disclosure of incomplete surgery; ultimate disclosure unsatisfactory condition found or inability to correct by surgery.
2. Emphasize and retain proof of vitally important advice.
3. Duty to follow-up after surgery.

Finally, safe-guard the prior surgeon. Don't condemn, even inferentially, his treatment until you learn from him the facts.

The whole character of a society may be conditioned by the nature of the disease common to it, and the happiness and progress of its people will depend to no little degree upon the status of the medical sciences and on the extent to which they are employed for the public good. Richard H. Shyrock, *Public Health Reviews*, Mar., 1940.

Regulations against expectoration in public places are not merely an exhortation to good manners; they are an expression of a theory as to the mode of infection in pulmonary tuberculosis which was held before the discovery of the bacillus and was the common property of all physicians. S. Roodhouse Gloyne, M. D., *Tubercle*, Feb., 1940.

There is no single absolutely reliable sign or symptom of activity in tuberculosis. Its determination must rest upon the most careful and thorough consideration of all of the general and local symptoms and signs, together with the results of the various laboratory and clinical studies. Miller, James Alex., *N. Y. State Jour. of Med.*, Dec., 1939.

The sputum-positive cases are a matter of grave concern. They insist upon being discharged to their families and the community; yet segregation is of first importance in controlling tuberculosis. By segregation did our ancestors rid the country of leprosy. Welsh Nat'l Mem. Assn. Report, *Tubercle*, Nov., 1939.



## *Pentothal Sodium — Its Field of Usefulness\**

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The main purpose of this paper is to indicate the field of usefulness of sodium ethyl (1—methylbutyl) thio-barbituric acid, commonly known as pentothal sodium, the criteria being its indications and contraindications. However, included will be a short resume of the history of intravenous anesthesia, as well as some of the more important basic features relative to the chemistry, preparation, and administration of the drug. Finally, an analysis of 500 cases collected during the first quarter of the present fiscal year at Hartford Hospital will be given in an attempt to show the widening horizon of its field of usefulness.

For the past six decades<sup>5</sup>, the intravenous route for administration of an anesthetic agent has held the interest of physicians. During that interval, the method has enjoyed a fluctuating degree of popularity. Oré, in 1872, was the first perhaps to attempt employment of this method, using chloralhydrate as the agent. Many other drugs have undergone clinical trial, but it was not until 1929 when Zervas and his collaborators used sodium amytal that any real interest in the method was developed. Since then progress has been rapid; nembutal was introduced in 1930, evipal two years later, and pentothal in 1934. Other barbiturates have been tried clinically, but pentothal has proven to be superior to these for the production of surgical anesthesia; while the longer acting derivatives, sodium amytal and nembutal, are reserved for the control of convulsions and disturbed states.

Pentothal is the sulphur homologue of nembutal<sup>4</sup>. The presence of the sulphur is thought to account for its rapid detoxification, thus explaining the rapid induction and recovery exhibited by patients. The powder has been found to remain stable in the absence of moisture and atmospheric carbon dioxide<sup>13</sup>. It dissolves readily in water, pro-

ducing a light lemon yellow, strongly alkaline solution<sup>2</sup>. It is considered best not to use the solution if it has been prepared for more than 24 hours.

The drug is capable of producing respiratory depression<sup>6</sup>, the degree depending upon the amount of the drug in the circulation, or in other words upon the rate of its injection. Its effect on the heart<sup>17</sup> is secondary to the occurrence of anoxemia which may develop with the depression of respiration. Electrocardiographic tracings fail to show any marked untoward effects on cardiac action. Blood pressure is decreased initially, but returns promptly to its original value when the surgical procedure is begun. Peripheral vasodilatation occurs, but the skin remains dry. Blood flow is markedly increased and the temperature of the skin of the extremities is elevated from 2° to 3° C. unless peripheral vascular disease exists. With the loss of consciousness, and when the patient is in full narcosis, the pressure of the cerebral spinal fluid diminishes to approximately one-half its normal level; but return to normal is rapid as the patient regains consciousness.<sup>7</sup>

It is thought that the drug is rapidly destroyed within the liver, since none is recovered as such in the excreta. The products of decomposition are excreted by the kidneys and the process of destruction and elimination is not associated with apparent damaging effect on either the liver or the kidneys of humans<sup>18</sup>. An elevation of the level for blood sugar occurs and this reaction is more marked in the diabetic patient, and the return to normal is retarded<sup>9</sup>. The essential feature is the destruction of the drug within the liver. The return to consciousness by patients with complete urinary suppression will be rapid provided their hepatic function is normal. As is typical of other barbiturates, with the administration of pentothal there is an associated engorgement of the spleen,

\* Presented by Dr. Tovell at the Anesthesia Conference at the 88th Annual Session of the Maine Medical Association at Rangeley Lakes, Maine, June 24, 1940.

which in turn causes a dilution of the blood<sup>15</sup>. This reaction is directly in contradistinction to the effect produced by ether. As is true of other barbiturates, when pentothal is given in overdosage, it is prone to produce edema of the lungs. When the drug is administered in therapeutic amounts, depression of the respiratory center is negligible; but when it is given in excessive doses, respiration fails before the cardiac center is paralysed, thus affording one time to institute artificial respiration.

The administration of atropine prior to pentothal is imperative in order to minimize the likelihood of production of excessive secretion or pulmonary edema. Our usual method is to prescribe morphine, but it is given in decreased dosages as compared to those prescribed preliminary to inhalation anesthesia. We regard morphine sulphate 1/6 grain (0.01 gm.) as the maximal dose to be given one hour prior to operation. For those patients requiring sedation, a good night's rest can be assured by administering nembutal one and one-half or three grains (0.1 to 0.2 gm.) at 9 P. M.; an hour before operation the dose may be repeated. If larger doses of barbiturates are to be given orally, it is well to increase the interval between administration and time of operation. In order to avoid having the patient arrive in the operating room with a lowered blood pressure, nembutal may be given two hours preoperatively. For short operative procedures, preliminary medication, except the atropine, may be omitted; but it is generally conceded that for long operative procedures, the administration of adequate preliminary medication will reduce the amount of pentothal which otherwise would be required and the likelihood that respiratory depression will occur is remote<sup>12</sup>, provided due care is taken to limit the rate and the amount of pentothal sodium administered for the production of anesthesia.

In clinical use the concentration of the drug in solution may be either 5% or 2.5%. One gram of the powder may be dissolved in 20 cc. of sterile distilled water, or in 40 cc., as the case may be. The most commonly used point of injection is the median basilic or the cephalic vein in the antecubital fossa. Veins

at the ankle may be used but particular care should be taken to prevent stagnation in varicosities, otherwise release of a sufficiently large amount of the drug into the circulation within a short interval might produce a toxic reaction<sup>5</sup>. From 2 to 4 cc. of a 5% solution are injected in approximately 15 to 45 seconds, and during this interval the patient is encouraged to count or to talk. Onset of anesthesia is marked by slurring speech, depressed respiration, a sigh or a yawn, followed by loss of conjunctival reflex. Patients report that induction of anesthesia is pleasant. This process requires from 20 to 30 seconds. The needle is kept within the vein thruout the operation, and from time to time 1 or 2 cc. are injected as the signs of anesthesia indicate. By this fractional method of dosage, the controllability of the drug approximates that of an anesthetic agent given by inhalation. The most reliable sign of induction of anesthesia is the character of respiration. During light anesthesia, the respiratory excursions are full; whereas, in deep anesthesia the respirations become shallow.<sup>12</sup> A significant sign of depth of narcosis, and perhaps the best for use in judging completion of induction, is the degree of relaxation of the jaw. At all times these signs are subject to swift change associated with the rapid destruction of the drug.

Recovery is usually rapid and is not attended by restlessness or excitement. The rapidity of recovery depends to a great extent upon the degree of basal narcosis produced by the administration of nembutal. The patient awakens as from a refreshing sleep, and usually nausea is not experienced. A short period of inebriation may be manifested. An ambulatory patient should be required to rest from one to two hours after a minor operation; and upon leaving the hospital, he should be attended by some responsible person, irrespective of the fact that the patient may to all intents and purposes appear completely lucid.

There are some patients who display certain reactions, such as tremors, sneezing, coughing, and hiccoughing. These manifestations are seen infrequently and they usually can be eliminated by temporarily withholding further injection of the drug. They



occur less frequently after atropine has been administered as a part of the preliminary medication. If these signs of untoward reaction persist, one should discontinue the use of pentothal and turn to some other agent and method of administration.

The cardinal signs of overdosage are imperceptible respirations followed by cessation of respiratory activity and accompanied by the development of cyanosis.<sup>14</sup> The pulse usually remains adequate and regular until asphyxia has occurred. The administration of oxygen under slight positive pressure offers the best line of treatment, provided an adequate airway has been established. If necessary, endotracheal intubation should be done. Respiratory stimulants such as coramine, metrazol, or picrotoxin may be administered.

The one specific contraindication to the use of pentothal is the presence of hepatic disease since, as previously stated, the liver is the important center for detoxification of this drug. Likewise, those patients who are severely toxic or suffer from systemic debilitating disease are not considered to be candidates for this anesthetic because of the probable presence of coexisting hepatic insufficiency. If pentothal be given inadvertently to a patient suffering from hepatic damage, narcosis is usually prolonged. Patients with poorly functioning kidneys may be given pentothal, but extreme care in its administration should be employed and large doses should be avoided. Two patients in our series have been of interest in this regard. The first patient had considerable hepatic dysfunction, and he was given pentothal, inadvertently, for extraction of teeth. During the surgical procedure, pentothal was administered without untoward effect. Several hours elapsed before this patient regained consciousness and he remained in a semicomatose condition for 48 hours. He eventually recovered completely. The second patient was suffering from complete urinary suppression. He was given pentothal to permit a diagnostic cystoscopy. Although a moderate dose was employed, he had regained consciousness completely within 20 minutes after cessation of administration of the drug. It would there-

fore seem that hepatic dysfunction is the primary contraindication to its use.

Children under 12 years of age do not usually tolerate the intravenous administration of a barbiturate well because of hypersusceptibility to respiratory depression. Venipuncture is frequently difficult because of their small veins. Maintenance of a clear airway is also difficult. Patients suffering from respiratory embarrassment due to cardiac decompensation, bronchiectasis, advanced pulmonary tuberculosis, asthma, or emphysema should be administered anesthetic agents other than pentothal. For patients with tumors or inflammatory disease, involving the lateral structures of the neck, pentothal is contraindicated if there is any sign of encroachment on the patency of the trachea. In our series, we have attempted to rigidly enforce consideration of these contraindications and in all instances have employed other anesthetic agents.

There are other contraindications to the use of pentothal, but they vary in degree. They should apply for anesthetists who are not experienced in its use. We refer to such conditions as anemia, shock, disability associated with old age and certain operative procedures. Serious trouble may be encountered if pentothal be administered to a patient with anemia due to his increased susceptibility to anoxemia. Aged patients tolerate barbiturates poorly and pulmonary edema is likely to occur with the slightest overdosage. However, these conditions can be delicately evaluated by the experienced anesthetist; and therefore, these contraindications may be considered as elastic. Because, following the administration of pentothal, pharyngeal reflexes are incompletely abolished<sup>11</sup>, this agent has been, in our experience, unsatisfactory for tonsillectomy, bronchoscopy, or esophagoscopy. In our opinion, pentothal is not a satisfactory agent for the production of anesthesia where an intra-abdominal surgical procedure is contemplated. The dose is necessarily large and the relaxation which it affords is inadequate. However, when it is used as a supplementary agent to spinal anesthesia or regional block, it offers possibility for enthusiastic accept-

ance. Our series of patients for whom these combinations have been employed are small but the results have been encouraging.

Pentothal has three distinct fields of usefulness: 1. As a therapeutic aid. 2. As a diagnostic aid. 3. As an anesthetic agent. We will consider them in this order. For the immediate relief of convulsions, it has been found to be a reliable agent.<sup>5</sup> Usually it will suffice in those cases where the convulsions are due to overdosage of cocaine, novocaine, or strychnine. For those patients suffering from tetanus and eclampsia, its continued use is not advocated. It may be used initially, but the treatment should be continued with the longer acting derivatives of the barbituric acid series or some other agent. In the field of psychotherapy, it has been used successfully to aid in the correction of certain mental disturbances.<sup>8</sup> The dosage employed is minimal and the patient is prevented from falling asleep by repeated questioning. Hysterical aphonia and paralysis have been relieved by this method. Mental suggestion during the period of light narcosis may be sufficient but stimulation with a faradic current may add to the effectiveness of the treatment.

The administration of pentothal may be of definite value as a prognostic procedure prior to neurosurgical intervention for the relief of symptoms of Raynaud's Disease or essential hypertension.<sup>1</sup> In the former instance, if under the influence of full narcosis, the temperature of the surface of the fingers fail to reach a maximum of 35° C., it is unlikely that surgical intervention could offer a complete cure. In the latter condition, the advisability of operation can be satisfactorily determined. Usually after a day of rest in bed, the patient is narcotized with pentothal. The temperature of the toes and the patient's blood pressure are recorded every two minutes. The maximal temperature is usually reached in about 15 minutes, and after 15 cc. of a 5% solution has been injected. The lowest point to which the blood pressure falls with a dose sufficient to raise the temperature of the extremity to a maximum corresponds fairly well in most instances with the level of blood pressure which will obtain following neurosurgical intervention.

For an operative procedure requiring less than half an hour<sup>3</sup>, and in which relaxation is not a prime requisite, pentothal sodium may be employed. This more or less limits its use to the field of minor surgical procedures. However, the drug may be employed for the induction of anesthesia preliminary to the administration of agents by inhalation. This method is particularly applicable for patients about to undergo thyroidectomy. It may thus be used to replace the administration of tribromomethyl alcohol (avertin) in the patient's room. By using pentothal where the operative procedure involves use of a cautery, the hazard of explosion can be eliminated.

Table 1 indicates the extent to which this drug is employed at Hartford Hospital. This series of cases was collected during the first quarter of the fiscal year beginning October 1, 1939. An evaluation of the series reveals that it merely confirms results reported in former larger series. It may be well to note, however, that there has been a marked increase in the use of the drug for operative procedures involving the anus. For hemorrhoidectomy, the patient is placed in the prone position with the table broken. Maintenance of a clear airway has been found to be comparatively easy. Relaxation of the anal sphincter is adequate. Pentothal is increasing in popularity for surgical procedures involving the walls of the thoracic cage having been found satisfactory for resection of a rib and drainage of an empyemic cavity. Oxygen is administered thruout this latter procedure. It has been used with satisfaction for simple mastectomy. The drug is freely used for the production of anesthesia for the extraction of teeth. Regional anesthesia is employed where the patient's condition contraindicates the use of pentothal, and nitrous oxide and oxygen are administered to children. In the field of gynecology and orthopedics, pentothal still continues to be popular. Its use is limited and inhalation with cyclopropane and oxygen is preferred, if the patient's hemoglobin is low or if excessive hemorrhage has recently occurred or is likely to occur at the time of the operative procedure. When pentothal is employed in the presence of a lowered hemoglobin, oxygen is



administered thruout the procedure. Pentothal is not used as frequently as formerly for cystostomies and cystoscopies. In the former instance it has been found more expedient to carry out the procedure following an abdominal block and in the latter instance, nitrous oxide is being substituted in order that the patient may better coöperate in breath holding while radiographic exposures are being made. There is evidence of a definite trend toward the increasing use of pentothal as a supplemental agent to spinal and block anesthesia.<sup>16</sup> For surgical procedures involving structures within the lower abdomen where relaxation is of prime importance, we have in the past three or four months been using the combination of spinal anesthesia reaching to the tenth dorsal region supplemented by the administration of pentothal intravenously. The intravenous administration may be withheld until the inadequacy of the spinal anesthesia makes itself apparent, or the administration may be started prior to the incision and continued thruout the operation. For these purposes minimal amounts of pentothal are required. For surgical procedures involving structures within the upper abdomen, a similar technique is employed, following the establishment of an abdominal block. The advantages of this combined technique are evident—by employing the spinal, maximal relaxation is obtainable, but because it is supplemented by the pentothal, minimal doses may be given, and lower levels need not be exceeded. Also nausea and vomiting is better controlled. When this combined method is employed it is noteworthy that the reduction in blood pressure is not materially greater than when spinal anesthesia is employed alone. Intravenous anesthesia may be employed with satisfaction during the injection of air or oxygen as a contrast medium for encephelography or for exploration of a cerebral or cerebellar tumor. Regional anesthesia may be established first and supplemented with the administration of pentothal sodium when it is required. In our relatively small series, we have been so well gratified with results that the series will in all likelihood be extended.

It may be noted in Table 2 that the major-

ity of patients are between 20 and 40 years of age. The youngest patient was 11 years of age and the oldest was 89. Table 3 indicates that the duration of anesthesia for over 50% of the patients was less than one-half hour. In this particular series the shortest anesthesia was three minutes and the longest was 67 minutes. Table 4 indicates that in over 80% of instances, less than 20 cc. of a 5% solution of pentothal was employed. It is seldom that a dose of 30 cc. of the 5% solution is exceeded. Table 5 indicates that if patients are properly selected and if the agent is administered with proper safeguard, satisfactory results may be obtained in a high percentage of cases. In the group classed as unsatisfactory, incomplete relaxation involving muscles adjacent to the operative area, or of muscles of the jaw or larynx, was evident. Cyanosis occurred as a secondary reaction to this primary one. Coughing and struggling during induction may be noted on occasion. In one instance mild generalized twitching complicated the situation. Vomiting during induction was noted only once.

#### SUMMARY

The field of usefulness of pentothal sodium seems to be expanding and justifiably so. The contraindications to administration of the drug are specific and patients should be carefully selected. An efficient airway should be maintained thruout the administration. One should always be prepared to administer oxygen if necessary. It is seldom that one should exceed a maximal dose of one gram. With this agent and method of administration, satisfactory results have been produced. No operative fatalities occurred. In view of its apparent effectiveness and safety, inclusion of this agent in our armamentarium is justified. It seems reasonable to hope that further extension of administration among groups of patients now receiving inflammable anesthetic agents will occur. The agent is a potent one and should be administered by an anesthetist competent to control all situations that are likely to occur during the administration of any general anesthetic agent.

TABLE I  
VARIOUS OPERATIONS UNDER PENTOTHAL  
ANESTHESIA

<i>Dental</i>	
Exodontiae .....	169
Impression .....	1
Wiring of Jaw .....	3
Exodontia & I. & D. ....	2
Red. Frac. Mandible .....	1
Exodontia & Appl. Splint .....	1
Total .....	177
<i>Surgical</i>	
I. & D. ....	47
Anal Surgery* .....	40
Suturing .....	5
Exc. Carbuncle .....	5
Exc. Pilonidal Sinus .....	3
Expl. Chest Cavity .....	3
Dressing Burns .....	3
Amp. Finger .....	2
Removal of Nail .....	2
Exc. Naevus .....	2
Exc. Naevus & Seb. Cyst. ....	2
F. & C. Verrucae Hands & Feet .....	1
Exc. Neurofibroma .....	1
Exc. Cyst Breast .....	1
Exc. Lymph Node Neck .....	1
Exc. Exostosis .....	1
Exc. Epulis Jaw .....	1
Exc. Scars Neck .....	1
Removal Foreign Body .....	1
Biopsy .....	1
Amp. Toe .....	1
Open Thoracotomy .....	1
Total .....	125
<i>Gynecological</i>	
D. & C. ....	32
E. R. S. ....	30
D. & C. and Ins. Radium .....	13
Conization of Cervix .....	10
D. & C. Exc. of Cx. Polyp .....	5
Thera. Abortion .....	4
Exc. Bartholin Cyst .....	3
D. & C., Coniz. Cx., Post. Colpor. ....	2
Dilatation Vagina .....	2
Ins. Radium .....	1
D. & C., Trachelorrhaphy .....	1
P. V. P. ....	1

I. & D. Labium .....	1
Pelvic Exam. ....	1
Total .....	106
<i>Urological</i>	
Cystoscopy & X-ray .....	60
Cystoscopy & Fulguration .....	5
Dilatation of Stricture .....	3
Transurethral Resection .....	3
Cystoscopy & Removal Calculus .....	2
I. & D. Periureteral Abscess .....	1
Biopsy & Fulguration .....	1
Fulguration Venereal Warts .....	1
I. & D. ....	1
Total .....	77
<i>Orthopedics</i>	
I. & D. ....	5
Reduction of Fracture .....	2
I. & D. and Sequestrectomy .....	1
Exc. Subacromial Bursa .....	1
Transection Tensor Fascia Femoris .....	1
Total .....	10
<i>Supplemental</i>	
To Spinal .....	4
To Abdominal Block .....	1
Total .....	5
Grand Total .....	500

TABLE II  
AGE GROUPING

Under 15 .....	7
15-20 .....	20
20-30 .....	106
30-40 .....	101
40-50 .....	96
50-60 .....	82
60-70 .....	33
70-80 .....	15
80-90 .....	4
Misc. ....	11
Total .....	475
Youngest .....	11 years
Oldest .....	89 years

\* Hemorrhoidectomies, Fissures, Fistulae, Proctoscopies, Alc. Inj.



TABLE III

DURATION OF ANESTHESIA	
2-10 minutes .....	134
10-20 minutes .....	207
20-30 minutes .....	95
30-40 minutes .....	22
40-50 minutes .....	7
50-60 minutes .....	7
60-70 minutes .....	2
Misc. ....	26
<hr/>	
Total .....	500
Shortest .....	3 minutes
Longest .....	67 minutes

TABLE IV

AMOUNT OF PENTOTHAL 5% SOLUTION	
c. c.	
2-20 .....	449
20-30 .....	29
30-40 .....	5
40-60 .....	2
Misc. ....	15
<hr/>	
Total .....	500
Smallest amount .....	2 c. c.
Largest amount .....	60 c. c.

TABLE V  
RESULTS

Satisfactory .....	487	97.4%
Unsatisfactory .....	13	2.6%
<hr/>		
ANALYSIS OF UNSATISFACTORY CASES		
Rigidity .....	3	
Depressed Respiration with Cyanosis ....	2	
Cyanosis .....	1	
Cyanosis with Phonation .....	1	
Spasm of Jaw with Coughing and Cyanosis .....	1	
Laryngospasm with mucous and Cyanosis .....	1	
Struggling during Induction .....	1	
Mild Generalized Twitchings .....	1	
Coughing .....	1	
Vomiting during Induction .....	1	
<hr/>		
Total .....	13	

REFERENCES

1. Allen, E. V., Lundy, J. S., Adson, A. W.: Pre-operative Prediction of Effects on Blood Pressure of Neurosurgical Treatment of Hypertension. *Proc. Staff Meetings of Mayo Clinic.* 11:401-406 (June 24), 1936.
2. Bruhzit, O. M., Dox, A. W., Rowe, L. W., Dodd, M. C.: A Pharmacologic Study of Certain Thiobarbiturates. *Jour. Pharm. and Exper. Thera.* 60:125-142 (June), 1937.
3. Challis, J. H. T.: Basal Anesthesia for Short Operations. *British Med. Jour.* 2:386-387 (August 21), 1937.
4. Cullen, S. C., Rovenstine, E. A.: Sodium Thioethylamyl Anesthesia: Clinical Use. *Current Res. Anes. & Analg.* 17:201-205 (July-Aug.), 1938.
5. Garofalo, M.: The Present Status of Pentothal Sodium as an Anesthetic Agent. *J. Conn. Med. Soc.* 2:550-557 (Nov.), 1938.
6. Gruber, C. M.: Pharmacologic Actions of Newer Barbituric Acid Compounds. *Am. J. Obst. & Gyn.* 33:729-744 (May), 1937.
7. Horsley, J. S.: The Intracranial Pressure During Barbitol Narcosis. *Lancet.* 1:141-143 (Jan. 16), 1937.
8. Horsley, J. S.: Pentothal Sodium in Mental Hospital Practice. *British Med. Jour.* 1:938-939 (May 9), 1936.
9. Hale, D. E., Tovell, R. M.: Choice of Anesthetic Agents and Methods of Their Administration for Diabetic Patients. *Surgery.* 3:100 (Jan.), 1938.
10. Hutton, J. H., Tovell, R. M.: Pentothal Sodium; Intravenous Anesthesia. *Surg., Gyn., and Obst.* 64:888-891 (May), 1937.
11. Lundy, J. S.: General Anesthesia in Operations on Eye, Ear, Nose and Throat. *Arch. Ophth.* 17:137-145 (Jan.), 1937.
12. Mallison, F. B.: Pentothal Sodium in Intravenous Anesthesia. *Lancet.* 2:1070-1073 (Nov. 6), 1936.
13. Mulinos, M. G.: Properties of Sodium-ethyl-pentyl-malonyl urea (Pentothal Sodium). *Proc. Soc. Exper. Biol. and Med.* 34:506-507 (May), 1936.
14. Pratt, T. M., Tatum, A. L., Hathaway, H. R., Waters, R. M.: Sodium Ethyl (1-Methylbutyl) Thiobarbiturate. Preliminary Experiences and Clinical Study. *Am. J. Surg.* 31:464 (March), 1936.
15. Reynolds, C., and Veal, J. R.: Pentothal Sodium: Circulatory Effects. *Proc. Soc. Exper. Biol. and Med.* 37:627-628 (Jan.), 1938.
16. Ruth, H. S., Tovell, R. M., Milligan, A. D., Charleroy, D. K.: Pentothal Sodium: Is Its Growing Popularity Justified? *J. A. M. A.* 113:1864-1868 (Nov. 8), 1939.
17. Thomas, G. J.: Clinical and Laboratory Observations on Intravenous Anesthesia. *Current Res. Anes. & Analg.* (May-June), 1938.
18. Tovell, R. M., and Thompson, G. J.: Pentothal Sodium in Urologic Practice. *J. Urol.* 36:81-87 (July), 1936.
19. Tuohy, E. B.: Pentothal Sodium; Intravenous Anesthesia. *Current Res. Anes. & Analg.* 16:164-167 (May-June), 1937.

## *The Disturbed Physiology of Respiration as a Criterion in the Choice of Anesthesia\**

By MEYER SAKLAD, M. D., Providence, R. I.

By the term, Respiration, we mean the receipt of, the delivery to, and the utilization by the tissue cell of oxygen. The state of diminished oxygen delivery or oxygen utilization by tissue is termed Anoxia. Anesthesia may interfere with the control, mechanics and function of respiration and thus produce anoxia.

The hypoxic state resulting from a decreased oxygen intake is termed Anoxic Anoxia. The hypoxia caused by a delayed delivery of oxygen by the red blood cells to tissue because of a slowed blood stream is called Stagnant Anoxia. The decreased oxygen tension in tissue occasioned by an insufficient number or poor carrying capacity of the red blood cells is known as Anemic Anoxia. The inability of a tissue cell to utilize oxygen and thus suffer from oxygen want is named Histotoxic Anoxia.

In choosing the anesthesia, the anesthetist is confronted with not only the hypoxia which may be caused by the anesthesia, but also by an unsatisfied oxygen demand in the patient who comes to surgery. He must also be concerned with a reduced oxygen delivery to tissue that may be occasioned by the contemplated surgery.

*Preoperative:* The patient may be suffering from oxygen want. Anoxic anoxia may be present due to a diminution in alveolar ventilation. Some of the disease conditions which may be responsible for this are pulmonary tuberculosis, pneumonia, pleural effusion, pneumothorax and atelectasis. A cause for the decrease in the passage of oxygen through the alveolar membrane and thus the production of anoxic anoxia is the disturbed dynamics of respiration caused by such conditions as emphysema, pleurocutaneous fistula, bronchopleural fistula and paralysis of the diaphragm as the result of phrenicectomy. Respiratory obstruction may be

present due to a foreign body in the tracheo-bronchial tree or tracheal compression as by a substernal thyroid, phlegmon of the neck or hemorrhage into the tissues of the neck. Stagnant anoxia may be present because of a poor delivery of oxygen due to shock or cardiovascular disease. A low hemoglobin level as in hemorrhage or the decreased ability of red blood cells to carry oxygen due to the presence of fixed hemoglobin may be responsible for anemic anoxia. The high blood levels of such drugs as sulfanilamide and sulfapyridine may well be suspected of being responsible for this latter state. When, as the result of disease, the tissue cells are unable to properly handle oxygen histotoxic anoxia is present.

*Anesthesia and Premedication:* As previously stated anesthesia may be responsible for hypoxia in the patient. This is indeed true also of premedication. The drugs used for anesthesia and premedication are with the exception of scopolamine respiratory depressants and thus may cause anoxic anoxia. Spinal anesthesia is often associated with some degree of intercostal paralysis. Anesthetic agents as nitrous oxide and ethylene are ordinarily administered with a minimum of oxygen and may thus be responsible for oxygen want. An unsatisfactory tidal exchange may be caused by respiratory obstruction. With the loss in muscle tone incident to general anesthesia pharyngeal obstruction is by no means uncommon. Even slight degrees of pharyngeal obstruction to respiration, often unrecognized, are sufficient to interfere definitely with proper oxygenation. Irritating agents as ether or the presence of mucous, blood or vomitus may cause laryngospasm and interfere with the ingress of a satisfactory oxygen atmosphere.

The low blood pressure state of spinal anesthesia may be responsible for the produc-

\* Presented at the Anesthesia Conference, at the 88th Annual Session of the Maine Medical Association, Rangeley Lakes, Maine, June 24, 1940.



tion of stagnant anoxia. If associated with intercostal paralysis the deficient oxygen supply to tissue may be severe. Intravenous barbiturates and tribromethanol are not entirely free from occasionally causing low blood pressure states. Here, too, if associated with respiratory depression, tissues may suffer from lack of oxygen. The interference with cellular metabolism by anesthetic drugs and thus the production of histotoxic anoxia is very likely. Until such time as studies in this direction are made it is wise to consider such a possibility. Not only must the anesthetist not interfere with the delivery of oxygen to tissue but he must limit wherever he can the degree of drug saturation of tissue cells by the anesthetic agent.

An important and too often overlooked fact is that patients are often subjected to acute anoxia by surgery. This period of stress of surgery plus oxygen want may not only cause immediate damage but may play an important role in delaying recovery. Tracheal manipulation during the course of a thyroidectomy or injury to the recurrent laryngeal nerves may interfere with free respiration. The spilling into a bronchus of pus from an abscess cavity or bleeding into the tracheobronchial tree limits the amount of available oxygen to the alveoli. The dynamics of respiration may be severely interfered with during open chest surgery by the created pneumothorax and a possibly consequent fluttering mediastinum. Because of this respiratory efforts on the part of the patient may not result in a satisfactory tidal exchange.

The posture of a patient on the operating table may greater hinder proper oxygenation. Patients being operated upon for chest surgery are forced to breathe with the healthy dependent lung compressed by the lateral position. Further chest expansion is limited by the presence of a pad under the thorax. The upper arm lies often unsupported over the side of the table, compressing the chest still further. Downward traction of the scapula during upper thoracoplastic procedures further limits the lower lung from expanding.

The patient lying in prone position for operations upon the spine is severely handi-

capped. The respiration of an obese patient in Trendelenburg position is similarly interfered with.

The operating surgeon by manipulation may initiate reflexes which may result either in cessation of, or obstruction to respiration. The initiation of the carotid sinus reflex by operative procedures in the neck may result in sudden respiratory depression. Reflexes by rectal or upper abdominal manipulation may cause respiratory obstruction by cord adduction. Operative manipulation may be so great as to cause shock. This disturbed cardiovascular state because of the associated low blood pressure delays the delivery of oxygen to tissue. Hemorrhage may be sufficiently severe so as to reduce the number of red blood cells. A marked diminution of red blood cells reduces the number of oxygen-carrying bodies. A reduction in oxygen-carrying bodies is followed by a decreased oxygen supply to tissue.

The anesthetist should be familiar with all the foregoing disturbed physiologic states of respiration. It is his duty to search for and recognize in the patient abnormal respiratory conditions which may influence him in his choice of anesthesia. He must be fully conscious of the alterations in respiratory phenomena which anesthesia may occasion. He should be fully familiar with the proposed surgical procedure and the alterations in oxygen supply to tissue which are likely to occur.

The anesthetist should choose the anesthetic agent and method which will not further interfere with deviations from normal which already exist in the patient. The anesthesia should not subject the patient to oxygen want regardless of the preoperative physical state of the patient. When the possible alterations of respiration are recognized beforehand they can be compensated for by the anesthesia.

In the presence of a hypoxic state due to respiratory depression, respiratory depressants as morphine, barbiturates, tribromethanol and high spinal anesthesia are contraindicated. Regional, spinal anesthesia unasociated with intercostal paralysis and the inhalation anesthetic agents that can be given with a high oxygen content are here of value.

In the presence of acute pulmonary disease inhalation anesthesia is best avoided. Here regional and spinal anesthesia may be of benefit. For thoracic surgery or where inhalation anesthesia is desired the gases are of value. Of the gases cyclopropane would probably be of most benefit in the majority of instances. It is non-irritating to pulmonary mucosa and it is capable of being administered with an excess of oxygen. If the patient is already suffering from a diminished oxygen supply to tissue from whatever cause, any agent that will further interfere with the amount of available oxygen is contraindicated. The gases nitrous oxide and ethylene, the intravenous barbiturates and tribromethanol all limit the amount of oxygen available or depress respiration. They would thus have no role in anesthesia to a patient suffering from oxygen want.

Respiratory obstruction due to mechanical difficulties can best be prevented or treated by the establishment of an artificial airway. It is here that the trained anesthetist can exhibit some of his true worth. An artificial airway is best established by the introduction of an endotracheal airway. By the use of a fairly rigid and good sized tube respiratory obstruction from such causes as tracheal compression, collapse or manipulation can be obviated. The rather good sized diameter of the tube allows for free ventilation and exchange of gases. Respiratory obstruction that may be caused by bleeding or pus in the tracheobronchial tree may be relieved by the use of an endotracheal catheter through which a small catheter may be passed for suction of the foreign material.

Interference with the dynamics of respiration, as occurs in open chest surgery, can be compensated for by the maintenance of an intrapulmonary positive pressure. This increased intrapulmonary pressure allows for better ventilation and keeps the mediastinum from fluttering. In positive pressure anesthesia it is best to employ an endotracheal catheter. To prevent leakage about the tube and to prevent the gases being forced into the stomach, the use of an inflatable cuff about the catheter within the trachea is of very great value. Such positive pressure is best maintained intermittently. The col-

lapsed lung in the open chest should be inflated at regular intervals. Frequent ventilation of the collapsed lung aids in washing out accumulated carbon dioxide and possibly prevents atelectasis.

In the presence of a pleurocutaneous fistula where insufficient adhesions exist to keep the lung expanded positive pressure anesthesia should be employed. When there exists a bronchocutaneous fistula the constant loss of gases through the fistula should be compensated for by a constant increased delivery from the gas machine.

It should be part of the role of the anesthetist to keep alive the surgeon's consciousness of the dangers of oxygen want. The oxygen want in patients coming to surgery due to low blood pressure, anemia or hemorrhage should be corrected by whole blood transfusions. Where possible, this transfusion should be given at least twenty-four hours before the contemplated operative procedure. The addition of red blood cells to the blood stream of a patient whose hemoglobin is fixed by a drug is of great value.

In the patient already suffering from stagnant anoxia due to low blood pressure from shock, hemorrhage or circulatory failure, spinal anesthesia, intravenous barbiturates and tribromethanol are contraindicated. In this class of patient the best anesthesia would be one that does not interfere with a satisfactory oxygen supply. Cyclopropane and regional anesthesia either independently or combined may be considered the choice of anesthesia under these circumstances.

Since improper posture of the patient undergoing anesthesia and surgery may so seriously interfere with proper ventilation, the anesthetist must assume as part of his duty to do what he can to limit or prevent this interference.

In the lateral position, where possible, it is best to keep the lower knee flexed to prevent the patient rolling forward and if the upper arm is prevented from hanging free over the side of the table respiration can be well maintained.

Patients lying prone have their mechanism of respiration markedly interfered with.

*Continued on page 310*



## *The President's Page*

*To the Members of the Maine Medical Association:*

Members of the Association, 162 registered, who attended the Clinical Session in Bangor enjoyed not only an excellent program at the Eastern Maine General Hospital but also a friendly gathering and banquet at the Bangor House on the preceding evening. The Penobscot County Society merits congratulations.

The Clinical Meeting affords an opportunity for organized medicine, in this instance the Penobscot County Society in coöperation with the Scientific Committee of the State Association, to do something for the individual members. It affords, also, an opportunity for the Council, County Secretaries, and various Committees to hold meetings. And these groups accomplish something for the individual members. Allow me to cite instances in support of the above statement.

First the Council. All the Councilors attended and were called to order on both days by Council Chairman, Doctor Carl H. Stevens, of Belfast, for consideration of Association business. They approved the appointment of a Special Committee to review the Medical Care of indigent patients suffering with chronic maladies, and to review hospital facilities for needy patients. This Committee will be requested to gather information from all sections of the State, organize the data and make a report to the House of Delegates at the Annual Meeting in June. The Council also voted to support the recommendation of Doctor Mortimer Warren, Chairman of the Cancer Committee, to establish a State-wide policy for Care of Cancer patients and to take steps toward the organization of a Cancer Commission for the State.

Second the Committees. The Special Committee to scrutinize and analyze the financial condition of the State Association met with the Treasurer. The Special Committee on Tuberculosis held a meeting and outlined a policy for extension of early diagnosis, treatment and care of patients with tuberculosis. The Cancer Committee, in coöperation with the program committee of the Penobscot County Society, presented Doctor George C. Wilkins of Manchester, New Hampshire, who explained the organization and work of the Cancer Commission of New Hampshire. Doctor Hill's Committee on Graduate Education held a meeting to develop further plans for extending graduate education to the members.

And third, the County Secretaries. Seven County Secretaries met together with the Secretary of the State Society to discuss details of meetings and organizations (and I suspect some aspects of hunting and fishing).

The point is that all these men appeared and attended meetings which were for the benefit of our patients and our members. And I want to drive home the point that our Association will continue useful and strong just so long as our members willingly serve on Committees and attend meetings, just so long as our County Societies continue to elect active and hard working Secretaries and just so long as Delegates continue to elect interested Councilors. And just so long as all these Committees, Secretaries and Councilors show a willingness to do some work, attend meetings and give thought to the many problems which confront our Association.

THOMAS A. FOSTER, M. D.,  
*President, Maine Medical Association.*

## Editorials

### *Draft Board Physicians*

As stated in an editorial in *The Journal of the American Medical Association* (September 14, 1940) the medical profession is willing and ready to do its part in the efficient administration of the conscription act. The *Journal* says emphatically and correctly "the duty of the physician associated with the draft board is one of the utmost importance in relationship to securing a proper personnel for military service. On the physician rests the major part of the responsibility of deciding promptly whether claims for exemption on account of physical disability are just. Considering the fact that the physician associated with such a board is a resident in the district over which he has jurisdiction, the physician is not in an enviable position. He must hear the pleas not only of his friends and neighbors but also of his patients. To resist such importunities requires common honesty of purpose and a courage to do one's duty which is fundamental in the character of every good physician. No doubt he will be called upon to detect malingerers, perhaps to pass on certificates from family physicians and specialists certifying to disabilities which he will have to verify. The duties of physicians on these boards require not only honesty of purpose and courage to do right, even at the sacrifice of private practice, but also professional alertness to detect malingerers and misrepresentation.

"It has been generally understood that the physicians on the draft boards will make only a preliminary survey of the candidates who come before them. Those selected will be then sent to the special examining boards, which will be later constituted by the Army Medical Department. On these physical examining boards will rest the final decision as to whether or not the young man will go to camp."

Unquestionably great responsibility rests on the physicians attached to Draft Boards or

any other branch of the military or selective services and it can be assumed that on making his recommendations for appointment the Governor realized the necessity that the men appointed be physicians of proven competence and experience and above all men who warranted in all ways the confidence that would be reposed in them by the Federal Government, their State, and, above all, the people in the communities they serve.

Whether an assignment on a Draft Board puts a physician, or any other member, in an unenviable position might be open to debate but the fact is that upon his shoulders rests a responsibility we feel with confidence will warrant the great trust imposed. Statements of disability coming from family physicians and specialists should be based on facts hardly open to serious dispute or question. Verified they may have to be but that should be an easy task. What properly should concern physicians in an examining capacity on the Draft Boards is the statement that his examination will be a preliminary survey. If such a course is followed the needless expense and mistakes of the World War will be duplicated. Those who served on the Draft Boards at that time know full well that many times they were worked far beyond capacity, time was limited, the proper facilities meagre and often entirely lacking and they were afforded little help and opportunity to detect facts that should have been established. Common sense would seemingly dictate that the Draft Board examiner examine all who come before him carefully and thoroughly and if he needs help of professional nature in determining questions upon which he is in doubt then by all means he should have it. Men inducted in the various services should be physically and mentally fit to stand the gaff. Physical and mental blow ups, obtaining under the stress of military life, were far too numerous and expensive in the World War and the experiences of twenty odd years ago should not and need not be repeated.



## *The Fall Clinical Session at Bangor*

At the June session of the House of Delegates considerable doubt was expressed as to the advisability of continuing the fall clinical session and it was finally decided to accept the invitation of the Penobscot County Society with the length of time of the session to be determined by the Scientific Committee. Doubt had been expressed that a session lasting two days would attract a sufficient number of men to make the effort worthwhile. Unfortunately during October there are several meetings of a National and sectional type that attract a large number of men. It was finally decided that the meeting would occupy one evening and one day; the evening with a dinner to be followed by one speaker and the next day to be taken up with the clinical program.

It was the universal opinion of those who were fortunate enough to attend that in every way the session was a complete success. The total registration was 162, with over 100 attending the dinner. The speaker of the evening, A. N. Creadick, M. D., Associate Clinical Professor, Obstetrics and Gynecology, Yale University School of Medicine, had a message decidedly worthwhile and it was obviously provocative of an equally interesting discussion by many of the members. The clinical session again proves that the profession IS interested in the live and bread and butter topics of medicine. They were

practical, conducted most excellently and with free and interesting discussions and points from the audience. The operative clinic consisted of a pan-hysterectomy by Magnus Ridlon, M. D., of the Staff of the Eastern Maine General Hospital, and a Cholecystectomy by Robert M. Zollinger of the Peter Bent Brigham. Nothing but favorable comment can be made on these clinics and the friendly and neighborly attitude of the two surgeons. What they did and WHY was discussed freely, questions were welcomed and came from the surgeons in attendance, and they were answered in that pleasant way which is decidedly helpful.

The clinics started on time, they went along with a snap and if they did nothing else showed that we have in our midst men who in the language of the day are on their toes and are clinicians we can well be proud of. As usual the Penobscot Society was a delightful host; Dr. Craig and his staff had prepared well for the day and there was not the slightest hitch to the well planned and carefully carried out program. The meeting should dispel all doubts as to the advisability of continuing like sessions; it would be a serious mistake if we fail to carry on. President Foster in a few well chosen words expressed the thanks and appreciation of the Maine Medical Association for the delightful time enjoyed by all and that such thanks were merited was obvious by the reaction of the audience.

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### *Meyer Saklad—Continued from page 307*

The thorax cannot properly expand and the diaphragm cannot easily descend without raising the patient's trunk. If it is necessary to operate with the patient in the prone position diaphragmatic descent, and thus respiration can be aided by placing a pillow under the hips.

Patients in whom respiration is hampered by a diaphragm maintained high due to pressure from below as by a large intra-abdominal tumor, distended intestine or fluid do not tolerate the Trendelenburg position. It is wise here to delay the head down position until the abdominal cavity is opened and

until at least part of the increased intra-abdominal pressure is relieved. The Trendelenburg position may then be assumed by slow degrees.

*Summary:* The types of Anoxia-Anoxic, Stagnant, Anemic and Histotoxic have been defined. The hypoxic states as they may occur in the patient preoperatively and as a result of anesthesia and surgery have been considered. The relationship of anesthesia to possible states of oxygen want have been discussed.

## Necrologies

### *John Roscoe Varney, M. D., 1863-1940*

Doctor John Roscoe Varney, 77, practicing physician in Old Town, Maine, for nearly 36 years, died at his home Friday, October 25, 1940, following an illness of but a week, although he had not been in the best of health for some time. He is survived by his wife, who before their marriage was a graduate nurse, Miss Vernie G. Carter of West Ellsworth, who has the profound sympathy of a wide circle of friends in her time of great sorrow.

The son of David B. and Pamella Doane Varney, he had a decidedly wide range of activities before he decided to devote his life to medicine. He obtained his education in Lee Academy, Eastman's Business College in Poughkeepsie, New York; Vermont Medical School and was graduated from the University of Maryland in 1896. He interned in the Burbank Hospital, Baltimore, Maryland, and had taken a graduate course in the New York Medical School. He had practiced his profession in Springfield, Red Beach and Old Town.

He was twice married, his first wife who was Mary Lawler of Benedicta, died while they were in New York.

He was a member of the American Medical Association and the Maine Medical Association (Penobscot County), and the Phi Chi Society of Baltimore; also holding memberships in the Independent Order of Foresters, being one of the high court physicians for many years, the Knights of Pythias, the Masons and the Grange.

During an epidemic of small pox in the woods

of Northern Maine he was put in charge of a territory and carried on over snowbound roads and from camp to camp, losing in the entire winter but one of his 80 patients.

Funeral services were held at St. James Episcopal Church on Monday, October 28th, at 10.00 o'clock.

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### *Robert Cole Pletts, M. D., 1885-1940*

Doctor Robert Cole Pletts, 55, Brunswick town physician and health officer, died Saturday, October 5th, of injuries suffered early the preceding day when his automobile overturned as he was driving from Bailey Island to Brunswick.

Doctor Pletts was born in Montreal, the son of David A. and Isabelle Cole Pletts. He was educated in the public schools of Brunswick and was graduated from the Bowdoin Medical School in 1916. He interned in Malden and Lowell, Massachusetts, and then located in Brunswick, where he has carried on a large general practice, both in Brunswick and in surrounding communities.

Doctor Pletts was an interested and active member of the Cumberland County Medical Society and the Maine Medical Association, rarely missing a County or State meeting, and a Fellow of the American Medical Association.

Surviving are his widow, Mrs. Sara Pletts; five sons, Robert, Jr., of Bath, Harold, Donald, Richard and Gilbert of Brunswick.



## County News and Notes

### Cumberland

#### Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, October 1, 1940, at 8.15 P. M., with the President, Dr. F. A. Ferguson, presiding. There were 22 members and one guest present.

Resolutions on the death of Dr. L. A. Derry were adopted by the Club.

Dr. Richard Hawkes was appointed as the representative for the Health Division of the Council of Social Agencies, and Dr. James M. Parker was named as the member to serve on the First Aid Committee of the Portland Red Cross.

Dr. Philip Thompson, Dr. Frank Lamb, Dr. W. E. Tobie and Dr. H. V. Bickmore were named for the Banquet Committee.

Dr. E. E. O'Donnell presented an interesting paper on *Some Problems of Intestinal Surgery*. The paper was discussed by Drs. I. M. Webber, J. M. Parker, G. E. C. Logan and E. R. Blaisdell.

Alice Whittier, Secretary.

### York

The last meeting of the year was held on Wednesday, October 9, 1940, at the Hotel Thacher in Biddeford, Maine. Dinner was served at 7.00 P. M. and the meeting followed at 8.00 P. M.

Two new members were voted into the Society, William F. Corbett, M. D., of Sanford, and John Colby Myer, M. D., of North Berwick. Also Pliny A. Allen, M. D., of York, was accepted and transferred from the Massachusetts Medical Society.

Doctor Foster of Portland, our State President, gave a talk on the Early Doctors of York County, stating that our County was very instrumental in the founding of the Association.

Captain Zalesky of the Navy Yard at Kittery expressed his pleasure at being present.

Doctor Mitchell of the State Department of Health was present and made a few remarks, and stated that his Department was at the service of the County at any time.

Doctor Brickley, Medical Examiner for Suffolk County gave a well prepared paper on the *Cause and Manner of the Squalus Deaths*.

There were eight guests and seventeen members present.

### New Members

#### York

Pliny A. Allen, M. D., York, Maine.

William F. Corbett, M. D., Sanford, Maine.

John Colby Myer, M. D., North Berwick, Maine.

### Change of Address

#### Aroostook

Bernard Gagnon, M. D.

From Patten, Maine

To Houlton, Maine.

#### Cumberland

Lewis K. Austin, M. D.

From Portland, Maine

To Blackstrap Road, Cumberland Center, Maine.

### Coming Meetings

#### Kennebec

Kennebec County Medical Association, Frederick R. Carter, M. D., Augusta, Maine, Secretary.

Thursday, November 21st, at the Elmwood Hotel, Waterville, Maine. Program to be announced.

#### Penobscot

Penobscot County Medical Association, Forrest B. Ames, M. D., Bangor, Maine, Secretary.

Tuesday, November 19th, at the Bangor House, Bangor, Maine, at 6.30 P. M. Annual Meeting.

### Initiated as Fellows of American College of Surgeons

Wilbur F. Leighton, M. D., and Milton S. Thompson, M. D., of Portland, and Asa C. Adams, M. D., of Orono, were initiated as fellows of the American College of Surgeons, Tuesday, October 22, 1940, during the annual five-day convention of the college in Chicago.

### Aid to British Physicians

The Medical and Surgical Supply Committee of America, 420 Lexington Avenue, New York, N. Y., requests physicians to send extra instruments in usable condition which they can spare for British dressing stations.

Railway Express will call.

Dr. S. JUDD BEACH, Portland.

Dr. JOHN O. PIPER, Waterville.

Dr. FREDERICK T. HILL, Waterville.

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## Special Notices

### *Tufts College Scholarships Awarded*

Announcement of the four entering students at the Tufts College Medical School who have won Commonwealth Fund scholarships recently was made by Dean A. Warren Stearns. The awards are made to residents of Massachusetts, Maine, New Hampshire and Vermont. Each recipient, who receives \$1,000 for each of his four years of medical training, must agree to practice in a rural community in his home state for at least three years following his hospital internship.

The first-year students receiving the awards are C. Clark Streeter, B. S., '40, Tufts College, whose home is in West Somerville, Massachusetts; Clarence W. Whittaker, B. S., '40, Bates College, of Easton, Maine; Frank E. Perron, Jr., B. S., '40, U. of New Hampshire, of Manchester, N. H.; and Theodore W. Ling, B. S., '40, U. of Michigan, of St. Johnsbury, Vermont.

Of the forty-five scholarships granted since the awards were first made to the class of 1935, one only was transferred and this was at the request of the graduate himself. Eighteen Commonwealth Fund graduates are now practicing or starting

their practice as family physicians in rural communities of New England; the rest are still intern-ing or in Medical School, the announcement stated.

### *Vitamin-Free Foods For Research!*

A recent announcement by the Research Laboratories of the S. M. A. Corporation reveals that they are now in a position to provide vitamin-free casein and other vitamin-free foods for experimental purposes to researchers who have previously been obliged to manufacture these items for private use.

For many years the S. M. A. Corporation has been producing these foods exclusively for use in their laboratories. Now, with the expansion of their own facilities and the realization of the convenience to others engaged in laboratory work this offer is made to provide vitamin-free diets at an exceptionally reasonable cost. Quantities of one, five, ten or 100 pounds or more may be ordered directly from the Research Laboratories, S. M. A. Corporation, Chagrin Falls, Ohio.

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# The Journal of the Maine Medical Association

Volume Thirty-one

Portland, Maine, December, 1940

No. 12

## *Chemotherapeutic Procedures in Pneumococcus Meningitis* *A Fatal Case of Type XIX Pneumococcus Meningitis Treated with* *Sulfapyridine and Type Specific Rabbit Serum*

### CLINICAL AND POSTMORTEM FINDINGS

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and HENRY BRANN, M. D.

The mortality rate for pneumococcus meningitis had remained practically 100% despite the use of antipneumococcus serum and constant lumbar puncture drainage technique. Since chemotherapy was introduced in 1937, however, approximately two-thirds of the reported cases of this disease treated with sulfanilamide and sulfapyridine have recovered. Information concerning the optimum dosage and method of administration of these two new drugs has not yet been made easily available to the general practitioner of medicine who has opportunity to see and treat this condition only rarely. It would, therefore, seem worthwhile to record the following case of Type XIX pneumococcus meningitis treated with sulfapyridine and type specific antipneumococcus rabbit serum and to present a general outline of the chemotherapeutic technique involving the newer drugs. The case to be reported here failed to recover and offered opportunities for clinical observation and study of the disease and for objective study after death.

A 26-year-old white woodsman entered the

hospital 11/21/39 and died 11/23/39. He was perfectly well until five days before admission, when he noticed malaise. This was followed three days later by a steady throbbing headache which radiated from the back of the neck up into the vertex region of the skull and was not relieved by aspirin. He became feverish, drowsy, irrational, developed a stiff neck and thickness of speech on the day before entry; while more intense headache accompanied by nausea and vomiting were complained of on the day of admission.

PAST HISTORY was negative for chills, cough, pleurisy, earache or trauma to the head.

OCCUPATIONAL HISTORY revealed that patient was a woodsman and had frequent contact with horses.

PHYSICAL EXAMINATION showed a well developed and nourished male who walked about aimlessly in a dazed condition, somewhat as a person intoxicated. Positive findings were

\* Read in substance before the Androscoggin County Medical Society, Thayer Hospital Staff, Sagadahoc County Medical Society, and the Maine Section of the College of Physicians.



temperature of 103° F., pulse rate of 100 per minute, flushed face, dry tongue, profuse sweating, stiff neck, positive Kernig sign and generalized muscular rigidity. Important negative findings included: myotic pupils that reacted to light; negative eye grounds and optic nerve heads; heart rhythm regular and sounds of good quality without murmurs; lungs clear with no evidence of rales, abnormal breath sounds or percussion note; normal abdomen; and clear skin without evidence of rash.

ADMISSION LABORATORY FINDINGS. A lumbar puncture showed a cloudy fluid under increased pressure; a cell count of 439 and type XIX pneumococci.

Haemoglobin 85% S.; Color index .94; Rbc 4,510,000; Wbc 21,600, P. 87%, L.

5%, M. 5%, Band cells 3. Blood culture taken 11/21/40 showed a growth with pneumococcus type XIX.

Urine was dark amber, acid, specific gravity 1.020, large amount of albumen, v. s. t. sugar, rare leukocytes/ hpf, rare red blood discs, uric acid and frequent granular casts, few waxy casts.

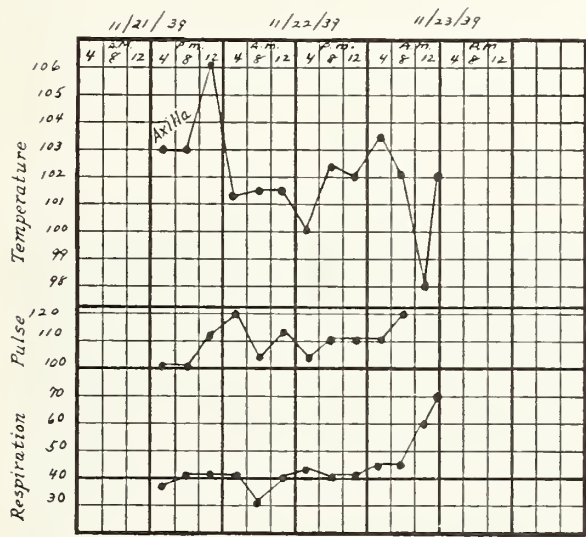
TREATMENT. A drop of antipneumococcus serum in the patient's conjunctival sac showed no sensitivity reaction. Intravenous therapy with type XIX antipneumococcus serum was instituted at 6.00 P. M., a few hours after admission, and sulfapyridine therapy was begun seven hours later. The time and the amount of antipneumococcus serum and sulfapyridine administered, with lumbar puncture findings, are listed in Chart I.

CHART I

Date	Hour	Number of Units of Type 19 Antipneumococcus Serum	Grams of Sulfapyridine	Blood Sulfapyridine Level	Spinal Fluid Sulfapyridine Level	
11/21/39	6.40 P. M.	5,000	—			Pneumococci in spinal fluid showed no swelling of capsules.
	8.20 P. M.	15,000	—			
	10.20 P. M.	20,000	—			
11/22/39	12.20 A. M.	40,000	2 grams			35 c.c. of spinal fluid withdrawn and no swelling of capsules noted. 8.5 c.c. of blood serum injected into spinal canal.
	1.20 A. M.					
	3.00 A. M.	20,000	2 grams			
	5.00 A. M.	20,000	2 grams			
	9.00 A. M.	20,000	2 grams			
	11.00 A. M.	20,000				
	2.00 P. M.	20,000	1 gram	5 mgs. %	2.75 mgs. %	{ Approximately 8 c.c. xanthochromic fluid removed when pressure dropped to zero. Direct smear showed no quelling of capsules on gram stain but pneumococci still typeable with type 19 antipneumococcus serum.
	4.00 P. M.	20,000	1 gram			
	6.00 P. M.	20,000				
	9.00 P. M.	20,000				
	10.00 P. M.		1 gram			
11/23/39	1.00 A. M.	20,000	1 gram	4.6 mgs. %	2.66 mgs. %	{ Removed approximately 35 c.c. xanthochromic fluid under slight pressure. Direct smear showed very rare organisms. No capsule quelling with gram stain but organisms still typeable with type 19 antipneumococcus serum.
	4.00 A. M.		1 gram			
	5.00 A. M.	25,000	1 gram			
	7.00 A. M.		1 gram			
	10.00 A. M.		1 gram			
	1.00 P. M.		1 gram			
	4.10 P. M.	Patient expired				
Total administered in 46 hours		285,000	17 grams			

One will note that the temperature fell from 106.8° on 11/21/39 at twelve midnight, to 101.2° at 4 A. M. on 11/22/39 and that it did not exceed 102.4° during the rest of the day. There was definite clinical improvement in respect to general appearance and decrease in restlessness. However, one notices that a fall of pulse and respiration rate did not accompany the fall in temperature. About twelve hours before death the pulse rate began to rise and the quality became thready. Respirations became rapid and shallow. His throat began to fill with mucous and moist crepitant rales were heard in the lungs. The extremities became cold and very cyanotic. Death occurred less than forty-eight hours after specific therapy was begun, and appeared to be the result of circulatory failure.

GRAPHIC CHART



POSTMORTEM EXAMINATION. Autopsy performed six hours after death showed the following: marked lividity and rigor mortis; a purplish discoloration about both auriculae, oral cavity, neck, and fingernail beds. The facies presented a sunken appearance. There was marked congestion of all organs and an excess of watery blood escaping throughout. The right auricle and superior and inferior venae cavae were distended. Fibrinous exudate and an excess of turbid fluid covered the base of the brain which was edematous and weighed 1690 grams. The spleen was enlarged and the sanguineous pulp excessive. There was moderate enlargement of the liver but the surface was smooth and tense. The

kidneys were slightly granular on capsular stripping. Both pleural cavities were free from adhesions and occupied by 20 c. c. to 30 c. c. of clear yellow serous fluid. Each lung was doughy and edematous, pitted on pressure with an excess of sanguineous frothy fluid escaping on pressure. The dependent portions were moist, soggy and heavy. A small indurated area involving the left lobe at its anterior aspect is found at the lateral periphery. Both pleurae show numerous petechial ecchymotic hemorrhagic areas. Similar lesions are present on the posterior surface of the ventricles. Coronaries are negative by inspection and visualization studies. Right lung is negative for induration and consolidation by visualization technique and serial sections. Right middle ear is occupied by a slightly turbid watery fluid. Cultures from heart, middle ear, lungs and spleen and fluid at base of brain are positive for pneumococci showing capsular swelling with anti-pneumococcic serum type XIX. Histological findings confirm gross observations and in addition reveal multiple foci of cerebral thrombosis.

DIAGNOSES

- Pneumococci Meningitis Type XIX with Septicemia.
- Toxic nephrosis.
- Toxic Myocarditis with Right Cardiac Failure.
- Toxic Splenitis.
- Acute Circulatory Collapse.
- Cerebral Thromboses.
- Bronchopneumonia, early.
- Marked Pulmonary Edema.

DISCUSSION

The *modus operandi* of the disease in this case may be postulated as follows: a middle ear infection followed by septicemia and this in turn by meningitis. The pulmonary lesions were of recent origin and the edema may be ascribed to an anaphylactic phenomenon. The circulatory collapse may again be considered an anaphylactic phenomenon with the pneumococcic toxin as the inciting factor. The positive cultures of the lungs are most probably of hematic rather than parenchymal origin as pneumococci rarely invade the lung



parenchyma by way of the blood stream. The mechanism of pneumococcus pneumonia production is at a variance with blood stream origin. The length of the disease process in this case confirms the theory of non-circulatory origin.

Direct smear of all lumbar puncture fluids and of pus taken from various places in the brain at postmortem failed to show any pneumococcus capsule swelling although 285,000 units of antipneumococcus rabbit serum had been administered intravenously. It is of further interest to note that the pneumococci in the spinal fluid continued to show capsule swelling when mixed with type specific rabbit serum despite oral administration of 15 grams of sulfapyridine.

Two factors may be responsible for the failure of this patient to recover. The sulfapyridine level in the blood and spinal fluid did not reach the optimal level of 10 mgs.% in the blood and 5 mgs.% in the spinal fluid. The initial improvement during the first twenty-four hours was followed by a rapid change for the worse and death in the next twenty-four hours. It is possible that cerebral thrombosis may have been responsible for this change for the worse. Lyons\* has suggested that continuous intravenous Heparin treatment should be used in conjunction with chemotherapy of pneumococcus meningitis, as he feels that many of the failures with chemotherapy in this disease are due to cerebral thrombosis which Heparin therapy prevents.

In another publication we have reviewed 47 cases of pneumococcus meningitis treated with sulfapyridine, and found that statistically the two drugs were about equally effective except that sulfapyridine was of considerable more value than sulfanilamide in the treatment of type III pneumococcus meningitis. Furthermore, it would appear that some of the failures reported for sulfapyridine may have been due to the low blood and spinal fluid levels of this drug which apparently were the result of marked variation in its absorption from the gastro-intestinal tract and its excretion from the kidneys.

It has been suggested that this irregularity in absorption and excretion of sulfapyridine

may be overcome by the parenteral administration of sodium sulfapyridine. However, insufficient cases have been treated thus far with soluble sulfapyridine to allow proper evaluation of this form of therapy.

From our review of the literature we were unable to demonstrate statistically that the mortality rate had been appreciably affected by the addition of type specific antipneumococcus serum. However, considerable evidence was presented in individual cases to suggest that antipneumococcus serum may be of benefit when there is bacteremia or a failure of the spinal fluid cultures to become sterile within twenty-four hours after the start of chemotherapy.

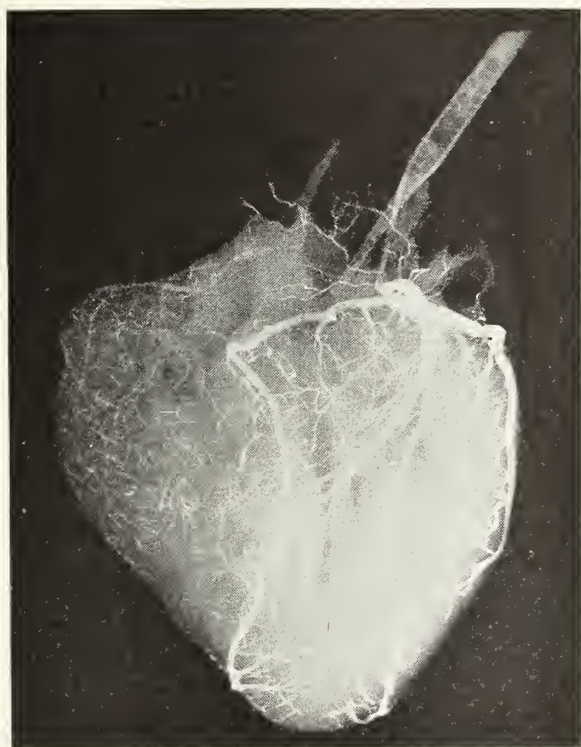
The following outline of a tentative treatment schedule for pneumococcus meningitis is suggested as an aid to the general practitioner. Since sulfanilamide and sulfapyridine have proven about equally effective thus far as chemotherapeutic agents, an outline of treatment is included for both drugs.

#### GENERAL PROCEDURE

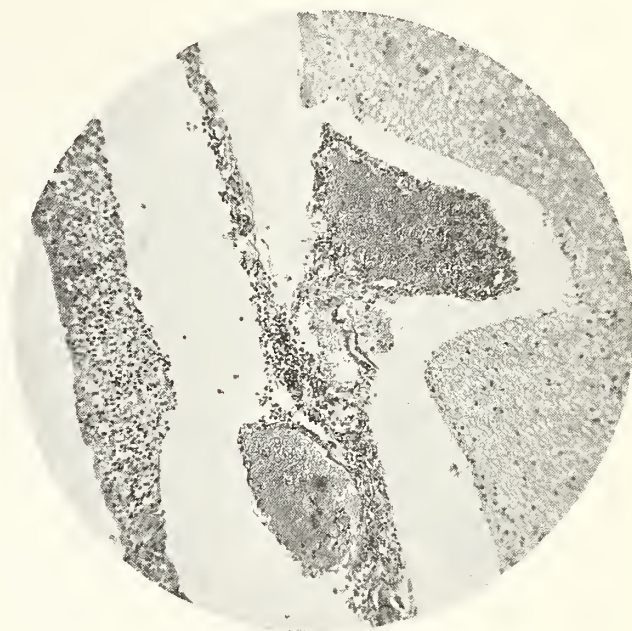
1. *Initial lumbar puncture.*
  - a. Do gram stain on spinal fluid.
  - b. Do cell count.
  - c. Culture spinal fluid.
  - d. Type pneumococci present.
2. *Repeat lumbar puncture every 12 hours until cultures are sterile. Thereafter repeat as necessary to control spinal fluid pressure.*
  - a. Repeat cell counts, cultures and direct examination for pneumococci and for any evidence of capsule swelling.
  - b. Determine spinal fluid concentration of drug used.
3. *Admission blood culture and daily repeats until blood stream is sterile.*
4. *Daily blood concentration of drug.*
5. *Sulfanilamide dosage for adults.*
  - a. Initial dose of 40 grains of sulfanilamide as soon as diagnosis of pneumococcus meningitis has been made.

\* Champ Lyons, M. D.; Mass. General Hospital—by personal communication





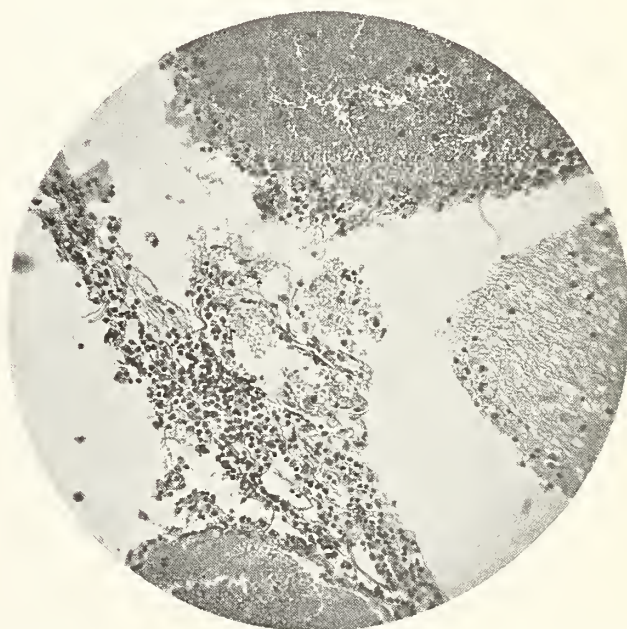
No. 1. X-ray demonstrating coronary circulation by coronary visualization technique, showing negative heart findings in the presence of vascular failure.



No. 3. Photomicrograph x 100 showing polymorphonuclear infiltration of meninges, early vascular thromboses and degeneration of brain parenchyma.



No. 2. X-ray of left lung following injection of bronchial tree with lead preparation. Demonstrates negative findings in the presence of pneumococcus septicemia except for early bronchopneumonic changes.



No. 4. Photomicrograph x 200 showing polymorphonuclear infiltration of meninges, early vascular thromboses and degeneration of brain parenchyma.

- b. Repeat dosage of 10 to 20 grains every four hours until blood level of 10 mgs. % or more and an optimal spinal fluid level reached.
- c. Thereafter, twenty-four hour maintenance dose of approximately 60

grains administered in divided doses at four hourly intervals.

- d. Drug should be continued for several days after cultures of spinal fluid are negative.
- e. In event of relapse, resume drug at once.



6. *Sulfapyridine dosage for adults.*
  - a. An initial oral dose of 4 grams (60 grains).
  - b. Repeat dose of one to two grams every four hours until a blood level of 10 mgs. % and a spinal fluid level of 5 mgs. % or more is obtained.
  - c. Thereafter, a maintenance dose of one to two grams every four hours as necessary to maintain blood and spinal fluid levels.
  - d. Drug should be continued for several days after spinal fluid has become negative.
  - e. In case of relapse, resume drug at once.
7. *Intravenous sodium sulfapyridine dosage schedule.*
  - a. Intravenous sodium sulfapyridine is given as a 5% solution of the drug in distilled water.
  - b. An initial dose of 0.1 gram per kilogram of body weight is injected.
  - c. Thereafter 0.03 grams per kilogram of body weight is injected every six hours, until signs of clinical improvement occur and two successive lumbar punctures are sterile.
  - d. Then sodium sulfapyridine in doses of 0.03 grams per kilogram of body weight is given twice daily for several days longer and then discontinued.
  - e. Resume intravenous therapy at first indication of a relapse.
8. *Intramuscular sodium sulfapyridine dosage.*
  - a. The drug is prepared in 3 c. c. vials which contain one gram of the sodium sulfapyridine in solution. One gram of the drug intramuscularly is said to be equivalent to 2 grams by mouth.
  - b. One ampoule (3 c. c.) of drug is administered deep into muscle every hour until optimal blood and spinal fluid is obtained.
  - c. Thereafter the blood and spinal fluid levels can be maintained by injections at four-hour intervals.
  - d. Dosage will depend on age and body weight.
9. *Indications for the addition of anti-pneumococcus serum to chemotherapy.*
  - a. The presence of bacteremia.
  - b. Failure of spinal fluid cultures to become sterile 24 hours after the start of chemotherapy.
  - c. Failure of patient to improve clinically with chemotherapy alone.
  - d. If patient is under two years of age (no antibody formed by patient until after second year of life).
  - e. If patient is over 40 years of age.
10. *Method of administering antipneumococcus type specific rabbit serum.*
  - a. Large doses should be administered intravenously.
  - b. Sufficient quantities should be given until there is an excess of antibody present in the circulation. Material is now available for making such a test for types 1 to 8 inclusive and type 14. Intracutaneous injection of a 1-1000 dilution of the type specific polysaccharid in saline is made. A wheal develops at site of injection within twenty minutes if there is adequate circulating antibody.
  - c. As soon as sufficient antibody has been administered intravenously to insure an excess in circulation, sufficient blood is withdrawn to allow formation of 8 or 10 c. c. of serum (complement) which is injected intrathecally at completion of the next lumbar tap.
11. *Heparin may be administered in the following manner should the physician feel that thromboses are occurring.*
  - a. Add 30,000 units of Heparin to 1500 c. c. of normal saline.
  - b. Administer 40 drops per minute of this solution intravenously for two hours (use Murphy Drip bulb).
  - c. Check clotting time of blood by the five-tube method at the end of two hours and thereafter as necessary.

## *The Use of Intelligence Tests in the Diagnosis of Psychotic Patients\**

By GRACE R. FOSTER, Ph. D., Psychologist, Augusta State Hospital, Augusta, Maine

An intelligence test may be defined as a problem or series of problems, a task or series of tasks, used to determine the grade or level of an individual's mental ability. Because this mental ability makes it possible for us to adapt either to other human beings, or to things, or to ideas, tests are frequently differentiated according to whether the intelligence which they measure is social, or mechanical or abstract. It is this last type which has been given most attention and because of the limits of time this paper will be concerned chiefly with it. Also it is appropriate that ideational tests be the chief emphasis since a psychosis by its very nature implies thinking disorder.

Both historically and practically the intelligence tests which have been of greatest importance are those known as the Binet-Simon Scale. During the first decade of this century, Alfred Binet was asked to prepare tests to determine the mental status of school children of Paris, France. With the help of a physician, Dr. Thomas Simon, he worked out the scale of 54 tests which has been translated into numerous languages and passed through many revisions. The most widely used of these in the United States was the revision made in 1916 by Lewis M. Terman and his associates at Stanford University. There are two scores obtained from the Stanford revision,—the *Mental age*, or M. A., and the *intelligence quotient*, or I. Q. The I. Q. is the mental age divided by the chronological age and it is generally conceded that this "measure of brightness" remains relatively stable throughout the life of the individual. The 1916 Revision contained 90 tests, 36 more than in the original Binet-Simon Scale. Each separate test contributed two months to the mental age score. By the use of many normal subjects it was determined what the average individual at each of the age levels could perform. Theoretically this method of sampling of abilities is based on a suggestion

made by Sir Francis Galton that it is possible to obtain a general knowledge of the capacities of an individual "by sinking shafts at critical points." Naturally there is considerable controversy in regard to just how critical are the points chosen by such random sampling, but nevertheless, experience suggests that the empirical method used has been to some extent successful. Terman, in introducing his latest revision of 1937, (1) quotes Galton, and remarks with justifiable complacency, "In our revision we have greatly increased the number of shafts and sunk them at points which wider experience with tests have shown to be critical." However, in this new Scale there have been retained many of the "critical points" for testing which were included in the original Binet-Simon, such as,—repetition of sentences, word definition, copying of a square, copying of a diamond, criticism of absurd sentences, making change, repetition of digits, word naming, and so on. This 1937 revision of the Stanford-Binet Scale provides two separate and distinct scales each of which includes 129 tests. It is claimed that this revision corrects faults of the earlier scale, which, Terman himself, said was defective at the extremes, that is below 4 years and above 10 years. This Revision covers a much wider range, beginning with the second year, and extending beyond the fifteenth year, with two series of tests for the Average Adult, and two series for the Superior Adult.

The use of intelligence tests with psychotic patients obviously presents difficulties, since because of the very nature of their disorder, they frequently are unable to use what intelligence they have. Through such tests, however, it is possible to gain some insight into what is the nature of this thinking disorder. Among the first to use the Stanford-Binet Scale with psychotics, was Dr. Frederick Wells. In 1920, in collaboration with Dr. C. M. Kelley, he published findings from

\* Presented at the Nervous and Mental Disease Conference at the 88th Annual Session of the Maine Medical Association, Rangeley Lakes, Maine, June 25, 1940.



these tests based on their researches at McLean Hospital. (2) Many of their conclusions have been further substantiated in more recent studies, but some of them continue to be controversial. In this latter category is the concept of "scatter", which Wells defines as the number of tests failed below, and passed above, the mental age of the individual. Binet himself had observed that less scattering or range is seen in the test results of feeble-minded than those of psychotic individuals and had concluded that in these cases some interfering factor lessened the reliability of the score. Wells and Kelley found that the dementia praecox group recorded more "scatter" than the manic-depressive, and the organic group (in this case syphilis only was represented) than dementia praecox. Although this problem of irregularity of performance is still debated, and the diagnostic significance of such "scatter" is challenged, the concept holds possibilities which deserve thoughtful consideration.

The question of range and irregularity of performance on the Stanford-Binet Scale has been approached by Piotrowski from a qualitative rather than a quantitative viewpoint. (3) He studied the test results by means of what he terms the "Stanford-Binet profile," which is made by listing the successes and the failures between the basal age and the upper limit. He concluded from his study that by such a method "statistically significant differences between the psychotic and the non-psychotic can be demonstrated." He finds that although there seem to be *no important differences in the Stanford-Binet profiles of manic-depressive and schizophrenic patients*, there is a marked difference to be found among specific types of these two psychoses. The greatest difference was found between paranoic schizophrenics and depressed manic-depressives. The hesitancy of the depressed patients is apparently the chief factor in their inability to do what the paranoics did. However, in questions requiring accuracy such as in arithmetical reasoning, the depressed patients did well. Piotrowski concluded that in general the tests failed by psychotics "are the more complex tasks because they require a greater tenacity of purpose and a more adequate and rather unselective perception of the environment." In this connection he quotes

a similar conclusion from Wells: ". . . the more complicated and synthetic of the experiments accomplish a better separation of normal from pathological subjects; the chief separation of the latter is indeed through that most synthetic of all tests, that of practical life."

A study recently published by Kendig and Richmond offers some interesting conclusions similar to those cited above, but emphasizing such trends found in dementia praecox patients. (4) The performance on the Stanford-Binet of 500 such cases was compared with that of other groups of patients at St. Elizabeth's Hospital, Washington, D. C., and the conclusion reached that the dementia praecox were differentiated from the other groups "by conspicuous failure in tests demanding relatively great expenditure of attention and effort . . .". They also found that an analysis of tests results disclosed "a characteristic pattern of success and failure on the tests." Wells and other researchers have found that in this psychosis vocabulary ability is relatively undamaged, and Babcock worked out a technique for testing "mental efficiency" or deterioration in dementia praecox, by an analysis of the ratio between vocabulary age and mental age. The findings of Kendig and Richmond did not, in their opinion corroborate those of Babcock, and they were consequently forced to disagree with her conclusion that in dementia praecox a real impairment is involved. They assert that the results of their analysis "challenge the classical concept of irreversible deterioration as an inherent part of the praecox process."

In the testing of psychotic patients the differentiating between mental deficiency and mental deterioration is of utmost importance. Likewise it is important to recognize the fact that there are various types of mental deficiency, and that these cannot be satisfactorily assayed by merely one series of tests such as the Stanford-Binet. Nevertheless the thoughtful use of such a scale can give considerable insight into the personality of the patient, if its results be considered qualitatively as well as quantitatively. Thus it is possible to attempt not merely to determine the degree or extent of mental defect, but to likewise determine some of the other liabilities which have

made for personality maladjustment. Recently at the Augusta State Hospital the writer gave the Stanford-Binet tests to a patient who had for 18 years been an invalid. In giving the anamnesis her husband stated that "The doctors can't find the pains and begin to think there aren't any." Her medical care had cost him about \$2,000.: "I gave them every nickel I could rake and scrape . . . .". During recent years it had been necessary for him to wait on her "hand and foot", and he had not been able to go out to work in the shoeshop as he had formerly. In the 1937 revision of the Stanford-Binet Scale, the patient achieved a mental age of 6 years, 4 months and an intelligence quotient of 42. The fourth year was her basal age, since it was only at that level that she was able to do all the tests. She was unable to fold a six-inch square of paper twice, to make a triangle, after the method had been demonstrated, although this is done correctly by the average five-year-old. Her range or "scatter" extended from the fourth to the tenth year. The average ten-year-old is able to read a passage of 50 words in 35 seconds, making not more than two errors, and then recite ten items from memory. The patient read the passage in 25 seconds with only one error, but could give no memories. She remarked cheerfully, "I love to read, but I can't remember." When asked what she read, she said, "True Stories and that kind." This reading ability suggests one reason why the patient had found her *modus vivendi* satisfactory. It may be that the lack of manual dexterity suggested by her failure at the five-year level, was likewise one reason why she found housework irksome. When the patient found tests difficult a slight tremor of the hands was noticeable. The examiner asked if the work made her nervous, and the reply was, "No, but I am weak because I had an operation a little while ago." Upon inquiry she revealed that the operation had been done two and a half years ago. Such unconscious malingering was further suggested by the fact that although the patient frequently complained of the pains she was suffering, her face usually had the complacent expression of a kitten that has just lapped up a saucer of cream.

The above case suggests that not only do the findings of the Stanford-Binet tests help

to give insight into the cause of personality disorder, but that likewise the testing situation itself can do the same. The writer has found this to be the case especially in the testing of maladjusted children who for one reason or another have been brought to the Hospital for examination.

The tests in themselves are as interesting to the children as a game, and frequently serve as a neutral means of building up *rapport* and overcoming resistance or emotional blocking, especially when delinquencies are involved in their problem behaviour. It is possible thus not only to obtain objective results, but likewise to use the testing situation as a technique for subjective study of personality. Mood changes, general adaptability, self-confidence, attentiveness and distractibility are among the behaviour items which may be detected. Intuition, so called, is merely judgment built up through experience in paying close attention to "minimal cues." Clinical experience thus leads the examiner to quickly evaluate the diagnostic significance of the self-effacing hesitancy of the depressed, or the hilarious over-productivity of the manic. In the word-naming test at the ten-year-level of the Stanford-Binet, a young manic, looked out at the gray stone walls of our Hospital, and remarked ecstatically, "Palaces." Empathy as well as intuition may function in the testing situation. Dr. E. E. Southard long ago suggested that this ability to "feel oneself into" a patient was important as an index of diagnosis between certain groups of mental diseases, and made a suggestion which is of social significance in these troubled times: ". . . . a keener sense of the psychopathic on the part of the world will do away with many of the evils of false leadership which now drag us down."

Because of the limitations of time this paper has limited the discussion of tests to one narrow field, that of the Stanford-Binet. This one scale, as previously mentioned, measures only a few phases of intelligence, and those classified as abstract or ideational. It is wholesome to find that the most severe critics of intelligence tests in general, and the Stanford-Binet in particular, are among the psychologists who work with them.

This active dissatisfaction has led to the production of new scales of intelligence tests,



such as those Dr. David Wechsler has introduced at the Bellevue Hospital. His "*Full Scale*" contains ten groups of tests, the first of which is for range of information. (5) He writes that this has proved one of the most satisfactory in the battery and that its correlation with the total score is high. It is interesting to note that information tests have been used by physicians and psychiatrists long before psychometrics became a science. The writer recently had experience in using such tests in making a survey of the mental status of some 90 patients who, because of mutism or inaccessibility, had not responded well to a mental examination after admittance. The questions designed to determine "Mental Grasp on School and General Knowledge" in the routine Hospital form of mental examination can be varied to suit the varying abilities of individual patients, but the fact that questions remain relatively stereotyped gives the examiner those "norms" invaluable to the psychologist. Several of the patients were what would be termed "deteriorated dementia praecox," but the writer was surprised at the extent to which they coöperated when *rapport* was established and questions presented in a somewhat dramatic fashion. Such findings suggest those mentioned above, that often deterioration is more apparent than real. These conclusions are further substantiated by recent psychological studies made in connection with shock therapy.

Another impression gained by the writer from this experience in giving mental examinations was that psychologists could learn

from psychiatrists to use a subjective as well as objective approach in testing psychotic patients, and that such techniques could be considered as an art as well as a science. In giving intelligence tests there could be a more thoughtful analysis of the thinking disorder involved. The bizarre and desultory utterances of the schizophrenic are often symbolic, and only careful attention to the individual case will show any significance in the responses. Such an interpretive attitude is useful in determining the mental status of senile dementias. Often in such cases memory defects are covered by evasions, which in themselves to some extent suggest what the level of intelligence was when normal. One little old lady made a brave attempt to cover up lapses in memory, and when asked to locate Rome, gave an answer which at that time seemed of more than individual significance: "It's South Germany, near Tartary. It's hard to say; there've been so many changes since Old Pélee blew up and covered the earth with soot. . . ."

#### REFERENCES

1. "Measuring Intelligence"—Terman, L. M., and Merrill, M. A., Houghton Mifflin Co., 1937.
2. "Intelligence and Psychosis"—*American Journal of Insanity*, Vol. 77, No. 1, pp. 18-45.
3. "Objective Signs of Invalidity of Stanford-Binet Tests"—*Psychiatric Quarterly*, Vol. 11, No. 4, Oct., 1937, pp. 623-636.
4. "Psychological Studies in Dementia Praecox"—Isabelle Kendig, Ph. D., and Winifred Richmond, Ph. D., Edward Bros. Inc., Ann Arbor, Mich., 1940.
5. "The Measurement of Adult Intelligence"—Williams & Wilkins, Baltimore, 1940.

It is to be hoped that the generally accepted opinion that all elderly persons must cough, and that coughing is without danger to those about them, will soon be changed, and that all elderly persons with a chronic cough will be subjected to a physical examination as rigorous as if they were younger.—E. R. WIESE, *Amer. Rev. of Tuberc.*, Feb., 1940.

One of the needs for the control of tuberculosis today is for greater emphasis on the extent of the disease and less on its declining death rate. Rice, John L., M. D., N. Y. City Dept. of Health.

The rapid decline in tuberculosis mortality rates has been due mainly to lessening in the incidence of infection. Among those infected, the toll though diminished, is still appalling. Mortality statistics, morbidity reports, autopsy examinations, tuberculin tests and X-ray surveys, indicate that about half of all infected individuals develop clinical tuberculosis, and that from 10 to 20 per cent of them eventually die of the disease. The high risk of disease and death due to infection by the tubercle bacillus justifies increased efforts for its prevention.—EMIL BOGEN, M. D., *Amer. Rev. of Tuberc.*, August, 1940.

## *The Cross-Eyed Child — Some Important Considerations*

By LLOYD H. BERRIE, M. D., Houlton, Maine

The purpose of this paper is to review some facts of importance concerning the cross-eyed child. These unfortunate children are handicapped psychologically as well as physically, an effect that may have very considerable bearing upon their behavior later in life.

Broadly, squints may be divided into convergent squint, when the eye turns in, and divergent squint, when the eye turns out. There also may be deviations up or down, or mixed deviations.

If one eye habitually deviates while the other fixes it is known as a monocular squint. These are by far the most common. If, however, either eye fixes the object while the other eye squints, it is known as alternating squint and is due to lack of fusion sense, i.e., the ability to merge the separate images of the two eyes into one.

Normally the eye muscles so regulate the position of the two eyes that the object falls on corresponding points of the two retinæ thus stimulating corresponding retino-cerebral pathways and centers. This sensory-motor coördination initiates the way for single binocular vision—single vision with both eyes. However, this alone is not enough. Another sense is necessary to unite the separate images of the two eyes into one. This sense is called the fusion sense and begins to develop during the first seven or eight weeks of life and is normally fully developed at the end of age seven.

Should one eye deviate permitting the object to fall on dissimilar retinal points symptoms such as double vision, vertigo, headache, and other ocular discomforts may arise. If now that eye is covered the symptoms cease but single binocular vision is lost. The patient "covers" one eye by suppressing its image.

In doing so, that eye, lacking the governing effect of binocular single vision, deviates to such a degree that there is widely separated stimulation to the two retinæ and although symptoms may now be absent, there is lost ocular coördination. Thus, the eye remains deviated, vision is suppressed, and DEGEN-

ERATION OF THE PHYSIOLOGICAL FUNCTIONS COMMENCES LEADING, EVENTUALLY, TO A PERMANENT NON-FUNCTIONING EYE.

Squint may occur through marked differences in refractive error, under-development of the fusion sense or faulty action of the extra-ocular muscles.

It often begins during infancy, sometimes during the first year. They are most often seen during the second and third years, less so during the fourth year.

In considering treatment, shall it be medical or surgical? What can be done medically? First, and most important, is education. Every Doctor, mother and schoolteacher should know that the earlier cross-eyes are detected in a youngster the more amenable will they be for treatment. That squint WILL NOT CURE ITSELF. That THE CHILD WILL NOT OUTGROW IT. That latter myth is rather commonly accepted and probably arises from those rare cases of a converging eye which, when useful vision is completely gone, may gradually swing back laterally toward the position of rest and, in these cases, permanent blindness.

If seen early enough glasses and exercises will cure most cases, but if the squint is of long standing it may take years of training with exercises to get results, if any.

NO PATIENT WITH A SQUINTING EYE IS TOO YOUNG TO RECEIVE TREATMENT. A SQUINTING EYE THAT HAS LOST USEFUL FUNCTION AND IS UNCORRECTED BEFORE THE AGE OF SEVEN WILL UNDOUBTEDLY REMAIN THAT WAY THROUGH LIFE.

What is the best age to operate? There is no best age. If a patient under the age of seven has received proper medical treatment without success, surgical measures must be resorted to. In such instances the longer surgery is delayed the less apt will it be to obtain a good result.

In order to select the proper type of exercise or operation for a squint it is necessary to determine whether the abnormality is due to faulty action of the internal muscles, or of

*Continued on page 328*



## *The President's Page*

*To the Members of the Maine Medical Association:*

In a previous issue of THE JOURNAL I mentioned the pleasure and profit which accrued to the President of the Association in his annual visits to the County Societies. And I stated that the President was gratified to find the quality of medical service delivered by the practicing physicians of Maine to be on a high level. I would like to amplify on those statements.

Good fellowship and informal general discussion is apparent at all the meetings. Interesting cases and past experiences are talked over and amusing medical anecdotes are repeated. And before and during the dinner the social contacts are friendly and pleasant. It seems to me that this phase of the meeting is valuable to all physicians. The free exchange of views on current cases, the discussion of local problems, and swapping a few new stories unites the members into a stronger County Society. I think that the members who miss the meetings are losing a dividend on their investment in organized medicine.

Sound doctrine and fresh medical information characterizes all the papers and reports which follow the dinners. This phase of the meeting represents our continued interest in Medical Education. Your President has never attended a meeting without learning something, indeed many things, which added to his medical equipment. He has learned, furthermore, that the interest in graduate education, evident by the attendance at County meetings, doesn't stop at the adjournment of the meeting.

If we realize that a cardiogram is available in the Moosehead Region, ready and at hand to make records and that office laboratories are doing blood sugars, and other determinations along the small coastal towns we appreciate that our members have continued their education.

Opportunities for continued education are especially well provided for members of our Society. We are fortunate, indeed, to have available the generous provisions of the Bingham Fellowships and the Commonwealth Fund. And every year we have the opportunity to share in the Program of the New England Post-Graduate Assembly conducted at Cambridge; a two-day Program which has interest for all practitioners.

In order to stimulate interest, establish a program and to furnish information the State Society has a Committee on Graduate Education. Dr. Frederick T. Hill and his associates form an active committee. In an early issue of the JOURNAL the Committee will publish a report. I bespeak your interest in the report, I urge your continued interest in your County meetings and added interest in the opportunities which present themselves. County meetings are pleasant and profitable, graduate courses also, are pleasant and profitable. Contact with other doctors outside of your own County is interesting and helpful, lectures and clinics by experienced teachers are interesting and profitable.

THOMAS A. FOSTER, M. D.,  
*President, Maine Medical Association.*

## Editorials

### *Some of the Objectives of Medical Education*

It has been truly said if the profession of medicine is to retain that public and professional confidence—to which medical education is entitled—it must assume a definite and positive leadership in every segment of the work. Medical schools have the responsibility for the selection and training of a sufficient number of competent physicians for the nation as a whole and constitute the entrance for those who would enter the profession. Medicine differs in no way from any other profession; success depends on the types and quality of those who gain admission to the schools. Graduation from any class “A” school it is admitted does not qualify the possessor of a degree for the independent practice of his or her profession and twenty-one states require an internship before licensure and thirteen medical schools make the fifth or interne year obligatory. The young physician is faced with the fact that an internship is a most necessary part in affording the proper basic foundation for practice and disregarding arguments as to whether this period assumes an under or post graduate aspect it is one of the most important phases of medical education. In many respects an internship makes or breaks the young physician and it is probably a fact, beyond dispute, that it is one of the weakest links in the educational chain.

For forensic, literary and political purposes the general practitioner is heralded far and wide as the backbone of medicine in the United States but unless a halt is called on some of the various commissions and the specialty boards limited in power it may be that the backbone of the profession will be broken and the general practitioner become more or less a door mat. Medical schools emphasize that the period of study of the entire medical course is formulated on the basic preparation for general practice and if the hospitals offering internships fail to carry on from this point, as they must and should,

it is obvious that drastic changes will be in order. The general interne of today becomes the practitioner of tomorrow and if the average man in the profession desires to make a living from the private practice of medicine, and most of them are faced with that necessity, he must be competent to do most of the services he is called upon for. It is admitted that there are highly technical services requiring special training and skills but it can be pointed out with emphasis that the economic demands of the nation require that the general man be removed from the position of becoming a medical referee or a directing agent to specialists.

Any hospital offering internships has a most important obligation and implied contract to meet. It is essential that it have, not only sufficient patients to furnish the training required, but it must have a staff competent to provide this instruction as it should be done. The various states have established regulations regarding internships and if the recent graduate desires and feels that he prefers to spend the required number of years demanded by the specialty boards it is distinctly the job of medicine to provide opportunities and methods. It, however, must not be forgotten that every state still retains the power to grant a license for the *practice of medicine* if a given candidate can meet its requirements. The state says nothing about the specialties in conferring the right to practice and despite the polite shoulder shrugging and back handed compliments of the ability of the general man it will be an unfortunate condition in the United States if he ceases to be.

One must by necessity commence at some time the study of medicine but success demands that efforts to become more proficient never cease. There are many communities in this country who have men who practice general medicine but by aptitude, study and experience have developed special skills in sur-



gery, obstetrics and other branches of medicine so that they serve their public efficiently and in a highly commendable way. The health and economic demands of the nation as a whole require that there be a sufficient supply of like properly trained men to meet the needs and opportunities as they develop. The future of the private practice of medicine rests on the fact that this supply must be sufficient and the issue cannot be met in any other way.

### *The Spirit of Christmas*

More than ever in this troubled and harassed world is there need for peace and happiness that belongs to all peoples. No one with a thinking mind can view with disregard and complacency the frightful suffering of millions who have been victims of the war machines of the totalitarian powers. Poland smashed and ruined; Czechoslovakia a vassal state; France bowing in humiliation in defeat wrought by treachery; England fighting gloriously to the end that civilization be saved and the hideous fate of other peoples be averted. Well indeed has our own country recognized the dangers that threaten and is preparing so that no power or combination of them shall inflict their way on us. It is not the boast of medicine that it has entered upon the duties belonging to it, with every bit of its possible strength and scientific skill, to aid in this vast and imperative undertaking. There is just one issue. We are needed and happily and willingly we serve.

The thought, however, must come to us that the spirit that belongs to this memorable day means more now as never before. To those colleagues in lands under the heel of men whose philosophy is at utter variance with the teachings of Him whose day we honor go our heartfelt sympathy. To those in lands fighting the great fight we are truly proud for the burdens thrust upon them seem unbearable. Many have made the supreme sacrifice, many are carrying on under conditions that seem impossible, yet come what may they will continue to honor their profession and themselves.

It is therefore in a humble and grateful spirit that we approach this Christmas sea-

son; grateful for the fact that the hideous fate of millions has not been our lot; grateful that we can and are as people aiding those who have and are fighting in a way that surely must evoke the admiration of those whose beliefs and methods we cannot share; grateful for the fact that fine and loving friends are still ours and that as a people our way has brought in manner of life and living the utmost that any nation has been blessed. Truly these are facts and for such we should be deeply thankful and are.

*Charles W. Steele, Julius Gottlieb and Henry Brann—Continued from page 320*

- d. Clotting time should be maintained at 60-80 minutes. Approximately 30 drops of Heparin-saline solution per minute will usually maintain clotting time at the desired level.
- e. Continuous intravenous Heparin therapy should be continued for a period of 10 to 12 days.
- f. Heparin may be obtained from the Connaught Laboratories of Toronto and is dispensed in ampoules which contain 10,000 units of Heparin in solution.

*Lloyd H. Berrie—Continued from page 325*

the lateral muscles. This can be accurately determined by testing muscle function at thirteen inches and at twenty feet. From the results obtained it is possible to determine whether a tenotomy or recession should be done on a muscle, or whether an advancement or resection is in order. It is also possible to determine whether a combined operation on antagonistic muscles will give best results.

#### Remember:

1. The cross-eyed child has a tremendous psychological handicap as well as physical.
2. If brought under competent care early (age 1 to age 7) much can be done without resorting to surgery.
3. To delay early treatment is to encourage unilateral blindness.
4. There is no surgical age. This must be determined by diligent study of each individual case.

## County News and Notes

### Cumberland

George Gilbert Smith, M. D., of Boston read a paper, illustrated by X-ray slides, on *Urinary Tract Infections*, at a dinner meeting of the Cumberland County Medical Association at the Lafayette Hotel, Friday evening, November 1st. The paper was discussed by Doctors Harlan R. Whitney, Jack Spencer, George Poore, Franklin A. Ferguson, Oramel E. Haney and Theodore M. Stevens, all of Portland. Luther A. Brown, M. D., President of the Association presided, and sixty members attended.

Thomas A. Foster, M. D., President of the Maine Medical Association, discussed a program of State cancer control and Sylvester Judd Beach, M. D., spoke on the need of contributions of medical and surgical material for British medical relief organizations.

G. E. C. Logan, M. D., of 131 State Street, and George C. Poore, M. D., of 192 State Street, were admitted to membership. Doctor Logan by transfer from the Oxford County Medical Society and Doctor Poore by transfer from the Philadelphia County Medical Society.

A clinic at the Maine General Hospital preceded the meeting.

DONALD H. DANIELS, M. D.,  
Secretary.

### Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, November 5, 1940, at 8.15 P. M., with the President, Doctor F. A. Ferguson, presiding. There were 39 members and one guest present.

Dr. George C. Poore and Dr. C. Lawrence Holt were elected to membership.

A nominating committee consisting of Dr. S. J. Beach, Dr. C. H. Hunt, Dr. F. J. Welch, and Dr. W. D. Anderson was appointed.

Dr. Carl M. Robinson gave an interesting paper on *War and Its Relation to Medicine*. He spoke of the effects of war on medical developments and surgical procedures. Dr. Thomas Burrage and Dr. R. O. Meisenbach contributed to the discussion.

ALICE WHITTIER, Secretary.

### Kennebec

A meeting of the Kennebec County Medical Association was held at the Elmwood Hotel, Waterville, Maine, Thursday, November 21, 1940.

Clinical Session at 5 P. M., was presided over by Blynn O. Goodrich, M. D., President:

- (1) Eclampsia—L. A. Guite, M. D.
- (2) Pituitary Tumor—James Poulin, M. D.
- (3) Streptococcal Throat—T. C. McCoy, M. D.
- (4) Diaphragmatic Hernia—M. F. Lubell, M. D.
- (5) Giant Impetigo Lesion—Ovide Pomerleau, M. D.
- (6) Extra-dural Hematoma—E. H. Risley, M. D.
- (7) Cerebral Hemorrhage—T. E. Hardy, M. D.

(8) Buerger's Disease—A. H. McQuillan, M. D.

(9) Carcinoma of the Breast with Angina Pectoris—J. O. Piper, M. D.

(10) Facial Paralysis Secondary to Skull Fracture—F. T. Hill, M. D.

(11) Glaucoma—H. F. Hill, M. D.

Dinner at 6.30 P. M. was followed by a business meeting.

Minutes of the last meeting were read and approved.

Napoleon J. Gingras, M. D., of Augusta, Maine, was admitted to membership.

Merrill E. Joss, M. D., of Richmond, Maine, was admitted to membership by transfer from the Sagadahoc County Medical Society.

The speaker of the evening was James Clarke Healy, M. D., Acting Professor of Pharmacology, Tufts Medical School. His subject was "Practical Observations on the Use of Sulfanilamide, Sulfapyridine and Sulfathiazole."

There were 43 members and guests present.

Respectfully submitted,  
FREDERICK R. CARTER, M. D.,  
Secretary.

### Oxford

The Annual Meeting of the Oxford County Medical Society was held at Bethel Inn, Bethel, Maine, October 30, 1940.

Norman M. Jackson, M. D., of Andover, was elected to membership.

B. L. Arms, Farmington, Supervising Health Officer for the Counties of Franklin, Androscoggin and Oxford, gave an account of his duties.

The following officers were elected for the ensuing year:

President: Joseph A. Villa, M. D., South Paris.  
Vice-President: Albert P. Royal, M. D., Rumford.

Secretary-Treasurer: J. S. Sturtevant, M. D., Dixfield.

Delegates to the 1941 annual meeting of the Maine Medical Association: H. M. Howard, M. D., Rumford; R. E. Hubbard, M. D., Waterford.

Alternates: J. L. Bean, M. D., Norway; D. E. Elsemore, M. D., Dixfield.

Auxiliary Committee on Legislation, D. M. Stewart, M. D., South Paris.

Councilors: D. M. Stewart, M. D., L. M. Corliss, M. D., and R. R. Tibbetts, M. D.

After a fine banquet, Everett D. Kiefer, M. D., of the Lahey Clinic, gave a most excellent lecture, with slides, on *Management of Peptic Ulcers*.

Thirty-three members and guests were present at the banquet. Among the out of county guests present were Frederick R. Carter, M. D., Secretary and Treasurer of the Maine Medical Association; Burton W. Trask, M. D., and Israel Newman, M. D., of Augusta; and Dr. and Mrs. Charles W. Steele, of Lewiston.

J. S. STURTEVANT, M. D.,  
Secretary.

**Your Membership Expires December 31st**



## Penobscot

The Annual Meeting of the Penobscot County Medical Association was held at the Bangor House, Tuesday, November 19, 1940, following a dinner at 6.30 P. M.

The following officers were elected for 1940-1941:

President: E. P. Goodrich, M. D., Winterport.

Vice-President: Earl S. Merrill, M. D., Bangor.

Secretary-Treasurer: Forrest B. Ames, M. D., Bangor.

Board of Censors: A. C. Adams, M. D., Orono; L. M. Cutler, M. D., Bangor; P. S. Skinner, M. D., Bangor.

Delegates to the Maine Medical Association Annual Meeting: F. B. Ames, M. D., Bangor; H. C. Knowlton, M. D., Bangor; L. J. Wright, M. D., Bangor; E. T. Young, M. D., Millinocket.

Alternates: C. H. Burgess, M. D., Bangor; H. D. McKay, M. D., Old Town; A. C. Strout, M. D., Dexter; M. C. Madden, M. D., Old Town.

A most interesting and instructive paper on *Common Blood Diseases* was presented by William Dameshek, M. D., Assistant Professor of Medicine, Tufts Medical School, Boston, Massachusetts.

There was an attendance of 63.

FORREST B. AMES, M. D.,  
Secretary.

## New Members

### Kennebec

Napoleon J. Gingras, M. D., Augusta, Maine.

Merrill E. Joss, M. D., Richmond, Maine. (By transfer from the Sagadahoc County Medical Society.)

### Oxford

Norman M. Jackson, M. D., Andover, Maine.

## Cumberland

G. E. C. Logan, M. D., 131 State Street, Portland, Maine. (By transfer from the Oxford County Medical Society.)

George C. Poore, M. D., 192 State Street, Portland, Maine. (By transfer from the Philadelphia County Medical Society.)

## Coming Meetings

### Kennebec

Kennebec County Medical Association, Frederick R. Carter, M. D., Augusta, Maine, Secretary.

Thursday, December 19th, at the Augusta State Hospital, Augusta, Maine.

Speaker: A. Warren Stearns, M. D., of Boston.

### Knox

Knox County Medical Society, A. J. Fuller, M. D., Pemaquid, Maine, Secretary.

Tuesday, December 10th.

Speaker: Henry C. Marble, M. D., of Boston.

Subject: Hand Injuries.

## Members Ordered to Active Duty

Army Reserve Officers: The following medical reserve officers have been ordered to extended active duty with the regular army by headquarters of the First Corps Area:

Clough, Herbert T., Jr., 1st Lieut., Bangor

Heifetz, Ralph, 1st Lieut., Portland

McWethy, Wilson H., 1st Lieut., Augusta

Naval Reserve Officer called to active duty:

Daniels, Donald H., Lieut., M. C. O., Portland

## Medical Personnel to Selective Service Boards

Medical Advisor to Staff: John G. Towne, Lt. Col., Medical Corps, Waterville, Maine.

### Appeal Boards

Board of Appeal No. 1

Harrison L. Robinson, M. D., 140 Hammond Street, Bangor.

Board of Appeal No. 2

R. L. McKay, M. D., 57 Eastern Avenue, Augusta.

Board of Appeal No. 3

Philip P. Thompson, M. D., 704 Congress Street, Portland.

### Medical Advisory Boards

#### BOARD NO. 1

Internists: Albert W. Fellows, M. D., 45 Ohio Street, Bangor; L. H. Smith, M. D., Winterport; Henry C. Knowlton, M. D., 47 Broadway, Bangor.

General Surgeon: John B. Thompson, M. D., 25 Hammond Street, Bangor.

Orthopedic Surgeon: Allan Woodcock, M. D., 35 Second Street, Bangor.

Ophthalmologists: Manning C. Moulton, M. D., 150 State Street, Bangor; R. M. McQuoid, M. D., 39 Columbia Street, Bangor.

Otorhinolaryngologist: Harry Butler, M. D., 228 State Street, Bangor.

Neuropsychiatrist: Carl J. Hedin, M. D., Bangor State Hospital, Bangor.

Clinical Pathologist: Herbert E. Thompson, M. D., Eastern Maine General Hospital, Bangor.

Radiographer: F. B. Ames, M. D., 489 State Street, Bangor.

Dentist: Maurice P. King, D. D. S., 31 Central Street, Bangor.

## BOARD NO. 2

Internists: T. J. Burrage, M. D., 142 High Street, Portland; E. H. Drake, M. D., 58 Deering Street, Portland; F. J. Welch, M. D., 44 Deering Street, Portland.

General Surgeon: C. M. Robinson, M. D., 31 Deering Street, Portland.

Orthopedic Surgeon: H. A. Pingree, M. D., 131 State Street, Portland.

Ophthalmologists: A. W. Haskell, M. D., 142 High Street, Portland; E. E. Holt, Jr., M. D., 723 Congress Street, Portland.

Otorhinolaryngologist: J. H. J. Lappin, M. D., 171 State Street, Portland.

Neuropsychiatrist: H. E. Macdonald, Jr., M. D., 21 Deering Street, Portland.

Clinical Pathologist: Mortimer Warren, M. D., 22 Arsenal Street, Portland.

Radiographer: Jack Spencer, M. D., 22 Arsenal Street, Portland.

Dentist: F. P. Higgins, D. D. S., 60 Deering Street, Portland.

### *Examining Physicians Local Boards*

**Androscoggin County**

Local Board No. 1  
Eustache N. Giguere, M. D., 98 Webster Street, Lewiston.

Local Board No. 2  
W. L. Haskell, M. D., 111 Pine Street, Lewiston.

Local Board No. 3  
Harold W. Garcelon, M. D., 2 Goff Street, Auburn.

**Aroostook County**

Local Board No. 1  
F. H. Jackson, M. D., Houlton.

Local Board No. 2  
Frederick L. Gregory, M. D., Caribou.

Local Board No. 3  
Richard L. Savage, M. D., Fort Kent.

**Cumberland County**

Local Board No. 1  
Harold V. Bickmore, M. D., 42 Atlantic Street, Portland.

Local Board No. 2  
Theodore C. Bramhall, M. D., 704 Congress Street, Portland.

Local Board No. 3  
Franklin A. Ferguson, M. D., 9 Deering Street, Portland.

Local Board No. 4  
Waldo T. Skillin, M. D., 448 Broadway, South Portland.

Local Board No. 5  
Earl Richardson, M. D., Brunswick.

**Franklin County**

Local Board  
George L. Pratt, M. D., Farmington.

**Hancock County**

Local Board  
Raymond W. Clarke, M. D., Ellsworth.

**Kennebec County**

Local Board No. 1  
Norman B. Murphy, M. D., 19 South Chestnut Street, Augusta.

Local Board No. 2  
L. D. Herring, M. D., Winthrop.

Local Board No. 3  
Theodore E. Hardy, M. D., 57 Pleasant Street, Waterville.

**Knox County**

Local Board  
H. W. Frohock, M. D., 10 Summer Street, Rockland.

**Lincoln County**

Local Board  
D. F. S. Day, M. D., Wiscasset.

**Oxford County**

Local Board No. 1  
D. M. Stewart, M. D., South Paris.

Local Board No. 2  
Eugene M. McCarty, M. D., 84 Main Avenue, Rumford.

**Penobscot County**

Local Board No. 1  
H. C. Scribner, M. D., 259 Union Street, Bangor.

Local Board No. 2  
H. Edward Whalen, M. D., Dexter.

Local Board No. 3  
Hugh G. McKay, M. D., Old Town

**Piscataquis County**

Local Board  
W. B. S. Thomas, M. D., Dover-Foxcroft.

**Sagadahoc County**

Local Board  
Joseph I. Smith, M. D., 73½ Front Street, Bath.

**Somerset County**

Local Board  
W. S. Stinchfield, M. D., Skowhegan.

**Waldo County**

Local Board  
Foster C. Small, M. D., 169 High Street, Belfast.

**Washington County**

Local Board  
John F. Hanson, M. D., Machias.

**York County**

Local Board No. 1  
D. E. Dolloff, M. D., 13 Crescent Street, Biddeford.

Local Board No. 2  
J. H. Macdonald, M. D., Kennebunk.

Local Board No. 3  
Stephen A. Cobb, Jr., M. D., Sanford.



## Correspondence

BOARD OF FOREIGN MISSIONS OF THE METHODIST EPISCOPAL CHURCH, 150 FIFTH AVENUE, NEW YORK, N. Y.

October 22, 1940.

The Editor  
THE MAINE MEDICAL JOURNAL  
Portland, Maine

Dear Editor:

I am sure all your readers will be interested in the experiences of S. H. Liljestrand, M. D., missionary of the Methodist Church in Chengtu, West China, along the Burma Road, and perhaps one or more readers may be interested in giving aid to his Hospital. Dr. Liljestrand (M. D., Syracuse, 1915) is a native of Jordan, N. Y., and has been in China since 1916.

The Women's Hospital, connected with West China University, Chengtu, was completely destroyed in a fire which followed a Japanese air-raid in August.

"The fire which destroyed the Women's Hospital destroyed all of my cystoscopic and electrotherapeutic apparatus and the accessories of a general gynecological clinic," writes Dr. Liljestrand. "Fortunately I had loaned a cystoscope to the Men's Hospital a block away. Also, the radium was saved, being in a patient that night. The patient was ambulatory. She went to a Chinese hotel because of the fire. In the morning, her honorable husband informed us of her whereabouts and the radium was recovered! I still have only fifty milligrams—but that is a mighty help.

"I lost a diathermy machine; an ultra-violet lamp, large size; three adult-size cystoscopes, one infant's and one children's cystoscope galvanic electrical apparatus.

"The fire also destroyed our medical periodicals—including those on urology, surgery, gynecology, and obstetrics.

"I would be very glad if we could get second-hand apparatus, and used copies of medical magazines. There continues to be great demand for our services in this war-torn section of China."

If any of your readers are interested in assisting Dr. Liljestrand with used but good conditioned material, will they please communicate with the Medical Department, Board of Foreign Missions, Methodist Church, 150 Fifth Avenue, New York City.

I trust you will be able to call this matter to your readers' attention. It will be greatly appreciated.

Sincerely yours,

(Signed) WILLIAM W. REID.

NEUROLOGICAL UNIT,  
BOSTON CITY HOSPITAL,  
BOSTON, MASS.  
11/25/40

THE JOURNAL OF THE MAINE MED. ASSN.

To the Editor:

We are compiling a family tree of the Lovering family that originally sprang, many years ago, from David Lovering of Greenwood, Maine. He carried the hereditary Charcot-Marie-Tooth type of progressive muscular atrophy, involving the hands and feet. His descendants have also gone under the names of Woodis, Stone, Rowe, Francis, and Wardwell.

Any physician who has had cases of this disease, especially in patients of the above names, is kindly requested to get in touch with us.

A. C. ENGLAND, JR., M. D.  
E. ROSEMAN, M. D.

## Supplies for the British

Maine is among the first states from which instruments for the British have been received.

It turns out that the offer of the Railway Express does not cover transportation of the donations to New York. Where they have pickup service it will take them to any collection point in the same town.

Further supplies should be sent to the Medical and Surgical Committee, 420 Lexington Avenue, New York City.

Local Committee

Dr. S. Judd Beach, Portland,  
Dr. John O. Piper, Waterville,  
Dr. Frederick T. Hill, Waterville.

## For Sale

William R. Tymms, M. D., formerly of Chebeague Island, Maine, has moved to Port Angeles, Washington, and wishes to sell his office equipment and instruments. These include a white enamel examining table, instrument case, sterilizer and instruments, many unused, including a large number of nose and throat instruments. Information regarding these may be obtained by getting in touch with Mrs. Philip M. Hill at Chebeague Island, Maine.

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## Notice

### *Association of Medical Students, New England Region*

The Fifth Annual Convention of the Association of Medical Students will be held in Boston at the Hotel Somerset, December 27, 28, and 29. The theme of the Convention, "Health For Americans," follows:

"Health is that state of physical well-being which provides the greatest efficiency for human endeavor. Organized American medicine has only recently recognized its role in the realization of this broader view of health.

"In providing for the better distribution of medical care, various agencies—organized medicine, hospitals and social agencies, the lay public and the government—have begun to act together. The full coöperation of all of these is essential for a satisfactory solution of the problem. Now, more than ever before, it is the responsibility of these groups, under the guidance of the medical profession, to maintain and extend health services to the nation. Even in the light of present conditions it must be remembered that the best program for the security of any nation is one that assures a healthy, well-fed, well-housed, well-clothed demo-

cratic people. Consequently, it is essential that public health expenditures not be curtailed as they are at present, but actually extended. It is a consideration of these general problems, and particularly of the leading role of the medical profession which is the theme of the A. M. S. Convention in 1940."

Dr. Henry Sigerist of Johns Hopkins School of Medicine, Miss Lucille McGorky, C. I. O. Health Committee, Mr. Kingsley Roberts of the Coöperative Medical Group in New York, as well as other prominent speakers in the field of public health, will discuss this theme. In addition, medical clinic presentations will be given by men prominent in American medicine. These include Dr. William Castle and his associates at the Thorndike Memorial Laboratories, Dr. Chester Keefer from the Evans Memorial Laboratories, Dr. S. J. Thannhauser of the Pratt Diagnostic Clinic, Dr. Eugene O'Neil of the Boston City Hospital, Dr. L. E. Phaneuf of the Pratt Diagnostic Clinic, and Dr. Soma Weiss of the Peter Bent Brigham Hospital.

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## Book Reviews

### *"A Textbook of Medicine"*

By: American Authors.

Edited by: Russell L. Cecil, A. B., M. D., Sc. D., Professor of Clinical Medicine, Cornell University Medical College; Associate Attending Physician, New York and Bellevue Hospitals, New York City; Associate Editor for Diseases of the Nervous System;

and Foster Kennedy, M. D., F. R. S. E., Professor of Clinical Neurology, Cornell University Medical College; Attending Physician, New York Hospital; Visiting Physician in Charge, Neurological Service, Bellevue Hospital; Consulting Physician, New York Neurological Institute.

Fifth Edition, revised and entirely reset. Illustrated.

Published by W. B. Saunders Company, Philadelphia and London, 1940. Price, \$9.50.

For the fifth time in thirteen years a large number of reputable American physicians, most of whom are teachers of medical specialties in university medical colleges, have coöperated to maintain the high quality of Cecil's Textbook of Medicine. One hundred and forty-four experts brought this excellent work up-to-date by careful and really worthwhile revisions. The original plan to provide medical students and practitioners with truly authoritative and up-to-date information on every medical subject has been strictly adhered to and successfully accomplished. One hundred thirty-one new illustrations have been added, thus further improving the teaching value of this popular work.

While giving freely information and advice concerning all available means and methods to treat disease as it afflicts mankind and to restore health and well-being, the reader is reminded that, in treating patients suffering from chronic ailments and terminal diseases "the physician with kindness, sympathy, courage, and resourcefulness, must travel the road with the patient, relieving his distress as much as possible and supporting his morale until finally the journey ends before the patient realizes that death is at hand."

### *"New and Non-Official Remedies, 1940"*

656 pages.

Published by the American Medical Association, Chicago, 1940. Price, \$1.50.

Each year the American Medical Association publishes a revised list of articles which stood accepted by the Council on Pharmacy and Chemistry on January first. In this book are published descriptions of acceptable proprietary substances and their preparations, proprietary mixtures if they possess important qualities and originality. This is a condensed but practicable text of pharmacology and therapeutics. Twice a year a supplement which brings this text up-to-date is published. Every product included must satisfy the official rules of the Council.

In addition to the many revisions in the text there are further revisions on data pertaining to action, uses, dosage, composition, purity, identity, strength and physical properties on many of the substances listed.

### *"Medical Nursing"*

By: Edgar Hull, M. D., F. A. C. P.; Clinical Professor of Medicine, Louisiana State University School of Medicine; Christine Wright, R. N., B. S., Graduate of Davis-Fischer Sanatorium, Atlanta, Georgia; Instructor of Nursing Arts, Charity Hospital School of Nursing, New Orleans, Louisiana, 1928-1939; Ann B. Eyl, B. S.; Assistant Dietitian, Cook County School of Nursing, Chicago, Ill.

168 Illustrations.

Published by the F. A. Davis Company, Philadelphia, 1940. Price, \$3.50.

According to the preface this book's aim is to impart to the student nurse an understanding of the principles of general medicine, to furnish her with brief yet accurate descriptions of the important diseases which fall within the realm of internal medicine, and to indicate the medical treatment, nursing care, and dietary management of these diseases. The three authors have made their contributions more or less independently, so that the student may see each disease from three different viewpoints: From that of the doctor, who directs the treatment; of the nurse, who administers it; and of the dietitian, who plans and prepares the diet. The book is divided into fourteen units, each dealing with different groups of disease conditions.

### *"Diseases of the Digestive System — A Textbook for Students and Practitioners"*

By: Eugene Rosenthal, M. D.; Lecturer in the Medical Faculty, Royal Peter Pazmany University, Budapest, Hungary; with a preface by R. J. V. Pulvertaft, M. D., F. R. C. P.; Reader in Pathology, University of London; Director of the John Burford Carlill Laboratories and Curator of Museum, Westminster Hospital School of Medicine.

With 234 Illustrations, including 104 in colour, and 16 tables.

Published by The C. V. Mosby Company, St. Louis, 1940. Price, \$8.50.

Natural teachers of the practice of medicine are rare. Most of the teaching is done by specialists. Here is a textbook written by a man designated as a natural teacher who came to America from Europe. He is dogmatic in his teaching method. He draws freely from his own experience. He courageously simplifies complicated arguments. He stresses the most essential information by rendering it more readily memorable by putting it into attractive diagrams. He successfully impresses the student's mind with the real events of human life in health and in disease. This will be of special interest for students with strong visual memories. As the title states, this book deals especially with that branch of internal medicine which embraces the pathology, diagnosis and treatment of the digestive organs; however, it is not written for the specialist but for the general practitioner. The method of teaching as exemplified in this book is rather new in this country and it will be of great interest to learn how well it will be received by the American student of medicine. Its prospects are good. If successful this method of teaching could easily be extended to other fields of education.

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VOLUME THIRTY-ONE

THE JOURNAL  
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MAINE MEDICAL ASSOCIATION



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